REFERENCE LIBRARY * HOUGHTON MIFFLIN CO. * BOSTON, MASS.
Archive
Collection

This book may not leave the Offices
and if borrowed must be returned within 7 days

POLLAK PUBLICATIONS

NUMBER ONE

THE MAKING OF INDEX NUMBERS

By Irving Fisher, Professor of Economics, Yale University. xxxiii + 526 pages, 120 illustrations. Second edition, Revised, 1924.

NUMBER TWO

MONEY

By William Trufant Foster, Director of the Pollak Foundation, and Waddill Catchings, of Goldman, Sachs and Company. xi + 409 pages. Second edition, Revised, 1924.

NUMBER THREE

COSTS AND PROFITS

By Hudson Bridge Hastings, Professor of Administrative Engineering, Yale University. xi + 168 pages.

NUMBER FOUR

CYCLES OF UNEMPLOYMENT

By William A. Berridge, Assistant Professor of Economics, Brown University. xv + 88 pages.

NUMBER FIVE

POPULATION PROBLEMS

By Louis I. Dublin, Statistician of the Metropolitan Life Insurance Company, and others.

NUMBER SIX

THE PROBLEM OF BUSINESS FORECASTING

By Warren M. Persons, Professor of Economics, Harvard University, and others. xiii + 317 pages, 55 illustrations.

NUMBER SEVEN

SOCIAL CONSEQUENCES OF BUSINESS CYCLES

By Maurice B. Hexter, Director of Federated Jewish Charities, Boston. xxiii + 206 pages, 34 illustrations.

NUMBER EIGHT

PROFITS

By William Trufant Foster and Waddill Catchings. xxii + 465 pages, 62 illustrations.

NUMBER NINE

REAL WAGES IN THE UNITED STATES

By Paul H. Douglas, Associate Professor of Industrial Relations, University of Chicago.

POLLAK FOUNDATION FOR ECONOMIC RESEARCH

Newton 58, Massachusetts

PUBLICATIONS
OF THE POLLAK FOUNDATION FOR
ECONOMIC RESEARCH

NUMBER EIGHT

PROFITS

Digitized by the Internet Archive
in 2026 with funding from
Boston Public Library

https://archive.org/details/profits00fost

PROFITS

BY
WILLIAM TRUFANT FOSTER
AND
WADDILL CATCHINGS

BOSTON AND NEW YORK
HOUGHTON MIFFLIN COMPANY
The Riverside Press Cambridge
1925

COPYRIGHT, 1925, BY THE POLLAK FOUNDATION FOR ECONOMIC RESEARCH

ALL RIGHTS RESERVED

The Riverside Press
CAMBRIDGE · MASSACHUSETTS
PRINTED IN THE U.S.A.

PREFACE

WHY must industry as a whole slow down because of 'overproduction,' when millions are suffering from 'underconsumption?' Here is at least one economic question that anybody can answer. The main reason, plainly, is that in a period of increased productivity the time soon comes when the people who want the goods which have already been produced lack the money wherewith to buy them. This answer, however, merely brings us to another question, and one which appears to baffle the entire financial and industrial world: *What causes this deficiency of purchasing power?* Or, to put the question in another way: *Why is it impossible for the people, as consumers, to acquire and enjoy all the commodities which, as producers, they are perfectly able and willing to make?*

The concluding section of this book, Part V, is an attempt to answer that question. The answer is based no less on *Money*, a book issued two years ago by the Pollak Foundation for Economic Research, than on Parts I to IV of *Profits*. The reading of *Money* is, therefore, to some extent a preparation for the reading of *Profits*. Since, however, some of those who have not read the earlier work will read *Profits*, we here give references to various parts of *Money* and summaries of other parts.

The reader of *Profits* who wants to get the substance of what we have to say, without going very far into the technical analysis or statistical basis, can take short cuts by following the guide-posts along the way. The reader who, on the other hand, wishes to pursue the statistical inquiry beyond the text will find references in the Appendix.

Although Part V is in substance a separate book, it is included in this volume because, on the one hand, we do not care to present such a justification of the existing money and profit system as appears in Parts I to IV, except in connection with the adverse criticism of that system which is the central theme of Part V; and because, on the other hand, we do not want our adverse criticism of the system to be considered apart from all that we have said in defense of it. Either our justification of the established economic order or our objection to it, standing alone, would misrepresent our position.

All that we have said in *Money* and in *Profits* leads to this main conclusion: Through no fault of any one class or any one agency, the established and approved methods of financing increased production and accumulating savings prevent the progress which otherwise might readily be made toward higher standards of living. The reason is partly because the total disbursements of industry in a period of expansion at first yield consumers more than enough money, and presently much less than enough money, to buy the additional output at the prevailing price-level; and partly because consumers, under the necessity of saving, do not spend even as much as they receive. The inevitable result is overproduction or, as we prefer to call the malady, 'underconsumption.' Wherefore producers as a whole, in a money and profit economy, have no choice; they must curtail production. Thus prosperity engenders depression; and there is no possibility of sustained progress toward achieving the material basis for higher standards of living.

What is the way out? That question will be uppermost in the minds of most readers; and they will be disappointed, no doubt, because we do not offer a definite answer. We venture no such answer at this time, partly be-

cause we regard an understanding of the problem as the first need; and we want nothing to stand in the way of an unbiased consideration of the problem itself. Once there is general agreement concerning the goal, there will be no lack of efforts to find the means of reaching the goal; but until men agree where they want to go, there is not much point in discussing the best way to get there.

Moreover, the best way is not likely to be discovered until statistical research has made further progress in various directions. Some of these we have pointed out from time to time, but only in a tentative way. As we said in the Preface of *Money*, so we say here: These pages are only introductory; an indispensable groundwork, we believe, but nothing more. Here we deal only with some of the larger aspects of monetary phenomena, the significance of which appears to be overlooked at times in discussions of business problems and reform programs. We hope soon to discuss certain refinements and qualifications, and in due time to propose plans for solving the problem.

For the present, we shall be content if readers agree with us that all proposals for changes in the established order, no matter from what source they arise, must be discussed in the light of the characteristics here outlined of an industrial society based upon the exchange of goods and services for money, and at a money profit; a society, moreover, in which both corporations and individuals are obliged to save. All this is fundamental. In so far as our exposition is erroneous, it must be corrected; but in so far as it is sound, it must be accepted as the admitted basis of all constructive programs.

'Nowhere,' says J. M. Keynes, 'do conservative notions consider themselves more in place than in currency;

yet nowhere is the need of innovation more urgent. One is often warned that a scientific treatment of currency questions is impossible because the banking world is intellectually incapable of understanding its own problems. If this is true, the order of society, which they stand for, will decay. But I do not believe it. What we have lacked is a clear analysis of the real facts, rather than ability to understand an analysis already given.'

Far-reaching changes in the established order are sure to come, for the people are and ought to be dissatisfied. Moreover, they are becoming increasingly aware of their political power, and they are giving more and more thought to economic problems. Measures are sure to be taken for the purpose of removing the unquestionable defects of the present money and profit economy. The only question is whether these measures shall be taken intelligently.

Upon those who are capable of dealing with this intricate problem rests, therefore, the responsibility of leading the way. The trouble is that it is precisely those who are competent who are most complacent. Those whose mental endowment and business experience would enable them to see the essential factors of the problem and to expose the folly of various radical reform programs, if they would make the necessary effort, are faring very well with things as they are. Partly for that reason, they frown on *all* proposals for substantial changes, no matter from what source these proposals come.

Before they achieved success, many of these men were unhappy over the inefficiency and injustice of our industrial system and eager to do something about it; but now that they have won fortunes in spite of conditions which once seemed to them intolerable, they are inclined

to think that any one who is not equally successful has only himself to blame. They do not see that the financial mechanism of industry is such that nobody can achieve great material prosperity except at the expense of others; nor do they see that, in any event, the problem of society is to take human beings very much as they are, and make the world a better place for them to live in.

However imperfect this book may prove to be, it is much nearer perfection than it would have been had we not taken advantage of the criticisms of the distinguished economists who have read the proofs: Herbert J. Davenport, Paul H. Douglas, Irving Fisher, Wesley C. Mitchell, Gilbert H. Montague, Henry R. Mussey, Warren M. Persons, Carl Snyder, and Allyn A. Young. These friendly critics, we hasten to add, have no responsibility for the substance; indeed, we are not sure that any one of them is prepared to accept our main thesis. Nevertheless, they have helped us to square our exposition with generally approved economic doctrines, as far as we ourselves are prepared to accept these doctrines. And that is far. Indeed, large parts of both *Money* and *Profits* are orthodox economic theory and, as one of our critics remarks, 'none the worse for that.'

We are glad to acknowledge, as well, the expert and generous aid of Lanius D. Evans of The Riverside Press, of Edwin T. Brewster of Andover, Massachusetts, and of Edith McDonald and Marian P. Cartland of the Pollak Foundation.

WILLIAM TRUFANT FOSTER
WADDILL CATCHINGS

NEWTON, MASSACHUSETTS
August 1, 1925

CONTENTS

PART I

INTRODUCTORY

I. The Economic Problem

We live in a money and profit economy, 4; Out of money and profits comes the economic problem, 6.

II. Profits the Heart of Industrial Life 9

Gradually weakening the profit motive is not practicable, 11; Great wealth has been produced by profit-seekers, 12; No other motive has been widely successful, 14; Without the profit motive, other motives can hardly function, 15; Continuous employment depends on profits, 18; Nearly all ways of making a living depend on profits, 20; Conclusion, 23.

III. Various Kinds of Income 25

Economics, 26; Money, 26; Goods, 27; Money versus wealth, 27; Income, 28; Real income versus money income, 28; Profits, 30; Profit the difference between two variables, 31; Private profits versus community gain, 33; Prices versus price-levels, 34; The forces of supply and demand, 35

IV. Various Sources of Profits 36

Sources of income, 37; Sources of profits, 37; Income from doing and income from owning, 38; Economical and uneconomical sources of income, 39; Profits may be due to chance, 41.

PART II

THE NECESSITY OF PROFITS AND LOSSES

V. Profits and Losses result from Risks 45

Business risks are not gambling risks, 48; Speculators usually deal in business risks, 49; A static society would have no risks and no profits, 49; No business risks are accurately measurable, 50; Some risks can be covered by insurance, 51; Profits result from wise choice of risks, 53; Summary, 56.

VI. Risks are due mainly to Consumers' Freedom of Choice 57

Three options go with money, 57; The freedom of the buyer is wide, 59; This freedom results inevitably in profits and losses, 61;

Consumers' freedom of choice involves wastes of competition, 63; Communism abolishes profits by abolishing freedom of choice, 64; Conclusion, 66.

VII. Reducing Risks tends to reduce Profits and Losses 67

Knowledge and publicity reduce profits and losses, 68; Publicity reduces profits and losses by promoting sound management, 71; Business statistical agencies reduce risks, 72; These services are proper functions of the Government, 73; Various Government reports now tend to reduce profits and losses, 75.

VIII. Reducing Fluctuations in the Price-Level tends to reduce Profits and Losses 78

Large profits and losses result from unstable money, 79; Business failures rise and fall with the value of money, 82; Maladjustments between industries are caused by unstable prices, 86.

IX. Competition tends to reduce Profits and Losses 88

Actual competition is never perfectly free, 89; Summary of Part II, 92.

PART III

THE AMOUNT AND DISTRIBUTION OF PROFITS

X. A Statistical Basis is Essential 97

The available statistics are inadequate, 98; These statistics do reveal important facts, 101.

XI. Profits are sometimes Losses 103

Business losses are large, 104; The number of business failures varies widely, 107; Conclusion, 108.

XII. Profits vary widely 111

Net corporate income varies greatly, 112; Total profits fluctuate widely from quarter to quarter, 116; The fortunes of each industry vary from time to time, 118; Profits vary widely among concerns in the same industry, 125; Profits of large concerns fluctuate widely, 129; Some industries prosper and others suffer in any given period, 131; Rates of profit vary widely among the industries, 133; Profits in England vary widely from industry to industry, 134; General business depression affects various industries in different degrees, 135; There is no normal rate of profit, 139.

XIII. Dividends and Surplus vary widely from Year to Year 141

Dividend rates vary widely from year to year, 143; The proportion of the national income that goes to surplus varies widely, 145; Net additions to corporate surplus vary widely from year to year, 145; These variations in surplus may have serious effects, 148.

XIV. Relative Incomes of Labor and Capital vary widely 150

The ratio of dividends to total personal income varies widely, 150; Incomes of labor and capital are alike insecure, 153; Income from doing and income from owning, 155; Profits from doing and profits from owning, 160; Summary of Part III, 161.

PART IV

THE FUNCTIONS OF PRICES AND PROFITS

XV. Buyers determine Prices 169

Usually buyers determine prices, 172; Relative costs, not absolute costs, determine profits, 178.

XVI. Prices determine who gets the Goods 180

Buyers compete with one another for the same goods, 181; Usually distribution must be on the basis of price, 182; Prices are right when they move goods, 184; Sellers take as much as buyers will pay, 185; There are many exceptions to economic rules, 188.

XVII. Profits determine who produces the Goods 190

Consumers control production by their dollar-votes, 191; Prices and profits determine how much is to be produced, 193; Most producers cannot increase profits by limiting output, 195; One function of profit is the elimination of the unfit, 196; No other way of determining production is feasible, 200; Conclusion, 202.

XVIII. Large Profits are sometimes unavoidable 204

Large profits result from rising prices, 205; Large profits result from a rising price-level, 206; Large profits result from low production costs, 208; Government price-fixing does not prevent large profits, 209; Some large profits are unavoidable, 210.

XIX. Government Control of Prices and Profits is impracticable 212

Communism offers no satisfactory substitute for prices and profits, 215; No Government can tell what price will yield a 'fair profit,' 217; Yet harmful profiteering can be reduced, 218.

PART V

MONEY AND PROFITS, IN RELATION TO CONSUMPTION

XX. The Economic Problem again 223

Increased per-capita consumption is the aim, 223; Business stability is not enough, 225; Productive deficiency is not the trouble, 226; Every advance leads to a recession, 229; The argument of Part V, 231.

XXI. Adequate Income for Consumers the Chief Need 234

The mental attitude of producers is secondary, 236; The mental attitude of buyers is secondary, 238; Conclusion, 239.

XXII. The Universal Fear of a Deficiency of Consumer Purchasing Power 240

Prosperity always brings fear of depression, 241; Capital, labor, and the State fear overproduction, 245.

XXIII. The Circuit Flow of Money and the Annual Equation 247

The annual production-consumption equation, 248; Overproduction, 249; The circuit flow of money, 250; Diagram of the circuit flow of money, 253; The flow of money and the flow of commodities, 256; Factors that alter the circuit time of money, 257; Perfect stability unattainable, 258.

XXIV. Corporate Income and the Annual Equation 260

Corporate savings, 260; Business in a simple community, 268; Case I, 269; The number of corporations is immaterial, 270; Case II, 273; Case III, 274; Case IV, 274; Case V, 276; Case VI, 278; Case VII, 281; Conclusions, 282.

XXV. Individual Income and the Annual Equation 283

Distinction between money invested and money spent, 284; Various ways of saving, 286; Savings in real estate and the like, 286; Savings in commodities, 287; Savings in hoarded currency, 288; Savings in banks, 289; Savings in life insurance, 292; Savings in corporation securities, 293; Savings in government securities, 295; The dilemma of thrift, 296.

XXVI. The Price-Level and the Annual Equation 297

Case VIII, 298; Case IX, 300; When prices are falling production is not increased, 302; Public ownership and the economic problem, 305; Summary, 306.

XXVII. The Volume of Money and the Annual Equation 307

Case X, 308; Case XI, 309; Another illustration, 311; Case XII, 313; Where new money enters the circuit flow is the main question, 317; It is commonly assumed that supply and demand 'automatically' balance, 318; Supply and demand, however, do not automatically balance, 320; When output increases, total consumer income is deficient, 321; The quantity theory in relation to the annual equation, 323; Increases in money are mainly on the production side, 325; Money expands most readily when least needed, 325; Money does not expand readily on the consumer side, 328; Changes in the velocity of money do not help matters, 329; The question is whether the currency shall be managed intelligently, 330.

XVIII. Government Finances and the Annual Equation 333

Taxes do not cause deficiencies in consumer demand, 334; Ordinarily government expenditures do not offset deficiencies in consumer demand, 336; Adjusting public expenditures to trade cycles does not offset deficiencies, 339; The tax laws may have moderated business depressions, 346.

XXIX. Other Factors and the Annual Equation 350

Summary of preceding chapters of Part V, 350; Other sources of income do not offset the deficiency, 352; Foreign trade does not overcome the deficiency, 352; Equitable distribution of income cannot solve the problem, 354; Use of savings in hard times does not offset the deficiency, 358; Speculation does not offset the deficiency, 361; Various time-lags do not offset the deficiency, 362; Demand must equal actual, not potential, output, 364; This theory does not exaggerate the importance of consumer demand, 366; Demand for producers' goods is secondary, 370; Sequence of events that lead to business depression, 373.

XXX. Statistics and the Annual Equation 376

Statistics of real wages do not reveal notable progress, 377; Income statistics show the inadequacy of consumer demand, 379; Indexes of production and distribution seem to tell the same story, 383; Balance sheets of individual corporations show how a deficiency arises, 395; Conclusions, 397.

XXXI. Conclusion 398

Consumption does not long keep pace with production, 399; A penny saved is sometimes a penny lost, 400; Some anomalies of current economics, 402; Economic calamity sometimes an economic blessing, 403; Deficient demand causes fear of imports, 405; The right flow of money is the chief need, 406; The conclusion of our argument, 409; How we have fared as well as we have, 410; But we have not fared very well, after all, 413; 'Anyhow,' it is said, 'the system works,' 414; The problem can be solved, 416.

Appendix: Notes to All Chapters 421

Tables 440

Index 461

LIST OF FIGURES

1. Profits 31
2. Fluctuations in the Purchasing Power of the Dollar 80
3. Commodity Prices in the United States and in England, 1800–1924 81
4. Business Failures by Quarters, 1913–24 83
5. Business Failures: Showing per cent Annually Failing of the Total Number in Business 84
6. Number of Business Failures by Classes of Establishments, 1914–24 85
7. Net Income of all Reporting Corporations, 1909–22 113
8. Trend of Profits in Leading Industries, 1921–23 114
9. Weighted Average of Profits in Leading Industries, 1921–23 115
10. Net Quarterly Profits of 164 Concerns, 1920–23 116
11. Quarterly Increases and Decreases over Preceding Quarters in Net Profits of Industrials in Great Britain, 1918–24 117
12. Net Profits of 36 Industrials and 128 Utilities, 1920–23 120
13. Annual Net Profits of 203 Manufacturing, Merchandising, and Public Service Concerns, and of 193 Class I Railroads, 1919–23 121
14. Fluctuations in the Profits of 52 Large Bituminous Coal Operators, 1913–22 122
15. Fluctuations in per Ton Cost, Sales Realization, and Margin of 127 Bituminous Coal Operators 123
16. Fluctuations in the Profits of 84 Coal Wholesalers 124
17. Profits and Dividends of National Banks, 1914–24 125
18. Comparative Range in Yearly Profits of Bituminous Coal Operators, Wholesalers, and Retailers, 1918–21 128
19. Net Annual Profits of the United States Steel Corporation, 1901–23 129
20. Earnings of Swift and Company, 1896–1923 130
21. Profits of Various Industrial Groups in 1923 132
22. Net Profits of Public Utilities, Industrials, and Railroads, 1919–24 136

23. Profits of 500 Selected Companies, 1913–24 139
24. Proportion of Net Book Profits of Corporations Paid as Cash Dividends in 1922 141
25. Proportion of Net Book Profits Disbursed as Cash Dividends by Various Industrial Corporations in 1922 142
26. Disposition of Gross Earnings of Federal Reserve Banks, in Millions of Dollars, 1915–23 144
27. Balance of Undivided Surplus of the United States Steel Corporation, 1901–23 146
28. Net Quarterly Profits of the United States Steel Corporation Available for Dividends, 1915–23 147
29. Personal Income, by Sources, in 1921 152
30. Fluctuations in Business Activity, 1877–1925 228
31. Circuit Flow of Money 255
32. National Income and Income Saved, 1909–18, Measured in 1913 Dollars 261
33. Percentage of Total Savings by Business Concerns, 1909–18 262
34. Total Savings Compared with Total Business Savings 263
35. Distribution of Each Dollar of Income of the General Electric Company, 1918–22 264
36. Distribution of Each Dollar Received by Swift and Company on Sales of Beef, Pork, and Mutton 265
37. Individual Bank Deposits, 1912–24 (in Billions) 290
38. Goods Produced and Money in Circulation, 1880–1920 314
39. Cash Reserves, Loans and Investments, Deposits, and Federal Reserve Notes of the Federal Reserve System, and Wholesale Commodity Price Index of the United States Bureau of Labor Statistics 315
40. Business Activity Compared with Volume of Credit in Use 322
41. Government Receipts from Customs, Income Taxes, and Profits Taxes 334
42. Indexes of Speculation, Money, and Business, 1919–24 343
43. Volume of Trade Compared with Wholesale Commodity Prices 343
44. Loans, Note Circulation, and Reserve Ratios of the Federal

Reserve System Compared with Wholesale Commodity Prices and Discount Rates 344
45. Call Money Rates and Federal Reserve Bank Discount Rates at New York 345
46. Proportion of Persons Receiving Incomes below Two Thousand Dollars, and Proportions of Total National Income Received by These Persons 355
47. Savings Deposits (in Millions) in 64 New England Mutual Savings Banks Compared with Business Activity 359
48. Savings Deposits, Number of Accounts, and Average Amount on Deposit in New England Banks 360
49. Fluctuations in Dollar Values of Wholesale Trade and Retail Trade, 1920–22 366
50. General Price-Level Compared with Wholesale Price-Level, 1875–1924 367
51. Decline in Wages during the Depression of 1921 380
52. Index of Employment, 1914–24 381
53. Volume of Trade Compared with Volume of Employment 382
54. Productive Activity Compared with Distribution to Consumers, 1919–24 385
55. Volume of Trade, Total Production, Production of Consumers' Goods; Distribution to Consumer; and Primary Distribution, 1919–24 386
56. Production, Stocks, and Unfilled Orders, 1920–24 388
57. Indexes of the Physical Volume of Trade, 1920–23 389
58. Basic Output, 1920–24 390
59. Wage-Earnings in Manufacturing Industries, Wholesale Commodity Prices, and General Price-Level, 1915–24 391
60. Real Incomes of Factory Workers Compared with Physical Volume of Trade, 1919–24 392
61. Money Incomes of Factory Workers Compared with General Business Conditions, 1919–24 393

LIST OF TABLES

1. Index of Business Profits 106, 440, 441
2. Fluctuations in Net Income of Corporations 112
3. Quarterly Net Profits of 164 Corporations 442, 443
4. Net Profits of Industrials in England 443
5. Average Rate of Profit Earned on Capital Stock 444
6. Net Annual Profits of Corporations by Industries, 1919–23 119
7. Rate of Profit of Various Steel and Equipment Concerns 445
8. Profits, Dividends, and Surplus of National Banks 446
9. Net Income of Individual Concerns on Invested Capital, after Taxes, in 1917 127
10. Profits of United States Steel Corporation 447
11. Capital, Surplus, Earnings, and Dividends of Swift and Company 448
12. Net Profits of 419 Companies in England 449
13. Net Profits of 1358 Companies in England 450
14. Profit, Surplus, and Dividends of Corporations Reporting Net Taxable Income of Two Thousand Dollars and over in 1922 451
15. Profits and Dividends in 1922 452
16. Average Rates Paid on Securities of Industrials in England 453
17. Personal Income 453
18. Distribution of the National Income 454
19. Distribution of Profits of Industrials in England 454
20. Surplus of all Corporations Reporting Net Income 455
21. Distribution of Value Added by Mining, Manufacturing, Railroad, and Public Utility Corporations 455
22. Personal Income from Service and from Property 151
23. Division of Combined Net Value Product of Mines, Factories, and Land Transportation between Earnings of Employees and Returns for Management and the Use of Property 153
24. Savings Deposits, 1912–24 456

25. Resources of 29,348 Reporting Banks on June 30, 1924 457
26. Investments of 52 Insurance Companies (in Millions) 458
27. Distribution of Personal Income, by Sources and by Income Classes, in Percentages, 1922 459
28. Physical Production and Money, 1880–1920 460
29. Effect of Corporation Finance on the Annual Equation

PROFITS

* * *

PART I

INTRODUCTORY

PROFITS

CHAPTER I

THE ECONOMIC PROBLEM

We do not live in a simple world. How far from simple the economic world of our time has become, we can best comprehend from a study of the day-by-day life of a pioneer, such as Knut Hamsun has given us in a remarkable book, *The Growth of the Soil*. Here we have a story of the simple, self-sufficient, economic life of a man who stakes out a claim in the virgin forest and proceeds, by the sweat of his brow, to wrest a living from Nature. Such a man never need be idle for lack of work. He clears the land by his own toil; he grows potatoes and eats them; he builds a shed and uses it for his cow; he raises a heifer and barters it for a cart. Whatever he manages to produce beyond his daily needs, he himself hauls to the local market. He is his own employer, his own carrier, his own salesman. He need not doubt — in fact, it does not occur to him to doubt — that the harder and the more intelligently he works, the more he has to consume. And it is plain that when, instead of consuming the heifer, he exchanges it for a cart, he is just that much ahead: he actually has the cart. There is no mystery about the fact that by thus saving, each season, a part of what he produces, he constantly increases the satisfactions of life. All his savings are real: there they are — tools, lumber, barns, cattle — all on his own land, always under his own

eye; and there is no way in which they can prevent him from continuing to produce and to save. To him the economics of industry is an open book. But the day of the pioneer is over.

We live in a Money and Profit Economy

First among the complications of our day is a medium of exchange. Its advantages to society, we have discussed in *Money*.[1] We have shown that, without a medium of exchange, man could not have created nations, developed the specialization and coöperation which characterize modern industry, accumulated the present vast store of wealth, and realized a standard of living for the rank and file of laborers far beyond the reach or imagination of primitive man, or even of the cattle kings of old. But money is more than a convenience; it can hinder as well as facilitate the production and distribution of goods. Indeed, the change from barter to money, far from being a mere matter of convenience, is fraught with such far-reaching consequences that some of the traditional economic principles, based as they usually have been upon barter-trading, do not apply to the currency and credit-trading world of to-day.

In particular, we explained at length how the introduction of money led to the periodic upsetting of the balance of supply and demand that characterized the dealings of the pioneer. Whatever the pioneer took to a barter market was his demand and another man's supply; whatever he carted back to his clearing in the woods was his supply and another man's demand. Each transaction was complete: the barter balance was perfect.[2] The primitive community produced what it consumed and consumed what it produced; but the intrusion of money at once made possible the overthrow of that balance. For

money is suspended purchasing power. It is left hanging over the market, to be used, nobody knows when, or where, or for what. To be sure, the introduction of a medium of exchange into the exceedingly simple barter economy did not at once confront society with the problems that, from the outset, were inherent in the use of money. It was not until the present era of highly complex industrial organizations and bank credit that it became possible for money, as suspended purchasing power, to play such an effective part in the ups and downs of business.

We live, then, in a money economy. Until we know what this involves, we cannot hope to understand either the achievements or the shortcomings of the industrial world of to-day.

Still more significant is the fact that we live in a profit economy: our entire economic order is based on the production of goods for sale at a money profit. It is easy to conceive of a money economy without profits; it is easy to conceive of a profit economy without money. Either would give rise to complexities with which the pioneer had no concern. They would, no doubt, be difficult to understand and difficult to deal with; but they would be simple compared with the complexities which arise out of the combination of a money economy and a profit economy — such sources of trouble, for example, as the possibility of money profits without real profits, and real profits without money profits, and the impossibility of telling, on any given day, whether there are going to be any profits at all. Complicated as the world of exchange becomes upon the introduction of a circulating medium, the addition of gigantic corporations, with money profits as their dominant aim, brings far greater complications. It thrusts upon us the great economic problem of to-day.

Out of Money and Profits comes the Economic Problem

That is the problem with which we opened our discussion of *Money*. Periodically, we observed, the economic organization of society falls far short of fully serving its one great purpose — the production and distribution of goods. That was the trouble in the United States, for example, during the depression of 1921. Consider the spectacle! Warehouses crowded with cotton, wool, leather, lumber, copper, chemicals — wealth beyond the dreams of former generations. Factories and machines, extensive, efficient, unparalleled. Millions of idle workers ready to do their part. A hundred million of our own people eager to enjoy the multifarious things that these idle men, by the use of these idle machines, would gladly make, and, in this age of scientific wizardry, could readily make, out of these surplus materials. Yet, month after month, there was sustained business depression. Materials, machines, money, men — all in superabundance — and no immediate means of bringing them into productive relations with each other. How to safeguard business against this periodic paralysis; how to prevent the resultant losses to society — losses far greater than the income of all our millionaires; how to keep our machinery of production moving at something approaching maximum capacity and the output moving into consumption at the same rate: this is the great economic problem.

It is not a simple problem. Evidently we cannot solve it so long as we continue to think of our industrial world in terms of a pioneer community. We cannot find out how business gets into these recurrent jams if, following the precepts of many of our writers, we ignore money and think only of goods. If a Swiss watch gets out of order, we cannot set the works in motion by attacking it as though it were a machine as uninvolved as a pulley.

The complexities of the money and profit economy of to-day are not illusions: they do not vanish merely because we refuse to recognize them. That is why all cure-alls for economic ills are necessarily nostrums. Ignoring some of the powerful, persistent, puzzling factors, they deal with an inherently complex problem as though it were simple.

That the problem of periodic business depressions is far from simple must be evident to any one who tries to understand exactly why we cannot manage, as consumers, to acquire and enjoy the goods which, as producers, we can readily turn out.

Consider the anomalies of the situation. We work hard to pile our shelves full of highly desired commodities; and then we have to stop working because we do not know how to take these things off the shelves and enjoy them. Though producing much less than our labor and capital, under more favorable conditions, could easily produce, we do not distribute to advantage even what we succeed in producing. We so involve ourselves at times that — incredible as it seems at first thought — we should actually benefit by giving the goods away, by sending them abroad to people who cannot pay for them, or even by burning them up. We ascribe our troubles in part to the extravagant buying of consumers at the very time when industry slows down because consumers are not buying enough. Then, while industry wanes because it lacks consumers, we put taxes on consumption; and, precisely when business needs increased consumers' income, we reduce that income by reducing wages. We strive to send more and more of our own real wealth abroad, but we are loath to accept any real wealth in exchange, since our people are unable to buy what they themselves produce. Before we have discovered how to use to advantage

what we already have of capital facilities, we feverishly build more. By thus investing our savings, instead of consuming them, we deny ourselves to-day in order that we may have a greater output in the future; though already we can produce more than we know how to use. All this seems paradoxical. Yet this is merely a glance at the surface of things; it gives no idea of the underlying complexities of our present money and profit economy.

In short, our economic life is no longer an open book, and we cannot hope to open it wide until we know the part that money and profit play in the world's work. For money, as we tried to make clear in our previous study, is the core of economic theory; and profit, as we shall try to make clear in this study, is the heart of industrial life.

CHAPTER II

PROFITS THE HEART OF INDUSTRIAL LIFE

Profits are the heart of the industrial society in which we live. The expectation of profits is the pulsating force that drives the life-sustaining blood to every part of the economic body. The blood is money. Whenever it flows, rightly distributed and in sufficient quantity, the various members of the body function; they keep each other active; life abounds in energy. When it does not flow, rightly distributed and in sufficient quantity, some of the members cannot do their part of the work; palpitation and debility result; the whole body is lethargic. Periodically, as we have just observed, this anæmic condition recurs; there is trouble in the central pumping station. Men, materials, and machines, ready to do their part, lack the driving force which is needed to put them into such relations that they can go on with the world's work. In the actual economic world in which we live, the pumping station cannot develop much power without the motive force of anticipated profits; and it cannot long continue to operate at all, unless the expected profits are actually realized. In short, the chief urge to business activity is the profit motive.

Whether this is a happy or an unhappy fact, we are not for the moment considering. The point to emphasize is that, whether we like it or not, it is a fact. Possibly an industrial world could be organized on some other basis; possibly it would be a better world in which to live. The one in which we now live is so far from perfect that we might well try to conceive of a nobler one — one built nearer to our heart's desire. And while we are thus giving

free rein to our imagination, it is interesting to speculate on the possibility of a human society in which the profit motive is wholly replaced by others, just as it is interesting to try to conceive of a human body in which a new kind of pump has taken the place of the heart. Each of these projects involves more than a major operation: it means the creation of a new organism. This comparison, which may appear unwarranted, we are thrusting forward at the outset, even at the risk of seeming prejudiced, and losing our readers before we are well under way. That would disappoint us, because we hope to say something important, before we get through, about the relation of profits to sustained business activity and to human welfare generally.

But we do not want anybody to follow us under false impressions. We have no panacea to prescribe for economic ills — nothing to offer as a substitute for a money and profit economy. We expect money to remain a central interest in life and profits the dynamic center of business enterprise. We see no possibility of running our machinery of production and distribution at any approach to its present efficiency, however unsatisfactory that may be, except under pressure of the profit motive. That it is a very powerful motive, the advocates of revolution must admit. Even Sidney and Beatrice Webb — distinguished for constructive work in economic history, in social reform, and in the British Labor Cabinet — declare in their account of *The Decay of Capitalist Civilization* that 'no competent observer of the business world will deny the efficacy of profit-making as a way of stimulating and canalizing the energies of those who practice it.' [1] That motive, in our view, is and will remain the heart of industrial society.[2]

In short, we expect that the future economic structure,

at least in the United States, will be built with infinite pains and with the aid of persistent scientific study, slowly, stone upon stone, year after year, upon the present foundations. That is the proved process of human progress. To burn down the house in which we live before we have even working plans for a new one is the way of retrogression. In any event, it is folly to destroy the real structure that toiling generations have reared and attempt to build a new one upon a foundation of untried theories, until we know a great deal more than we now know about the structure that we seek to demolish; until we know how it was designed and why; with what contributions to our comfort it must be credited; for how much human suffering it is responsible and how much is due to other causes; and what weaknesses, if any, are inherent in it, and cannot be remedied by any treatment less violent than dynamite.[3]

Many disagree with us. They believe that all countries, following the example of Russia, should demolish the present structure, foundations included, and immediately begin reconstruction on a communistic base. Such revolutionary programs we shall not consider here.

Gradually weakening the Profit Motive is not Practicable

We may well pause at this point, however, to remark that the alternative program of *gradually* weakening the profit motive in one industry after another is not practicable. If the Brooklyn Bridge is not the best means of getting across the East River, we should demolish the bridge and resort to ferry boats, rather than gradually weaken the supports of the bridge, taking out a cable here and a cable there, injuring one pier after another, until the whole structure collapses. That is the method of those who are trying to destroy the profit incentive

that is now operative in industry, without offering an effective substitute. It is the way the railroads in the United States were treated for many years. It is economic suicide. The man who thought that, by reducing rations a little every day, he could eventually make his donkey work without any food, had to abandon the experiment because the donkey died. Concerning the profit motive, Lenin was right in what he said at the beginning of his destructive career; but he was wrong before he died. He was right in declaring, at the outset of the Russian Revolution, that the quickest way to kill capitalism is to cut out its heart; that a new industrial organism must have a new heart. But he was wrong later on, after he had failed to find a working substitute for the heart of capitalism, in supposing that he could partially restore the heart and make it work effectively, while hampering its action in countless ways. Such a compromise is not workable: society must either use the profit motive — in such industries as it is used at all — for as much as it is worth, or kill it and supply a better one.

Great Wealth has been produced by Profit-Seekers

At least we must admit that, under the impulse of the profit incentive, the world made material progress, during the nineteenth century, with giant strides. Even *The Communist Manifesto* of Marx and Engels, published in 1848, before the era of great industrial achievements, declared that capitalism 'has created more massive and more colossal productive forces than have all preceding generations together. Subjection of Nature's forces to man, machinery, application of chemistry to industry and agriculture, steam navigation, railways, electric telegraphs, clearing of whole continents for cultivation,

canalization of rivers, whole populations conjured out of the ground — what earlier century had even a presentiment that such productive forces slumbered in the lap of social labor?'

The epoch in which the profit motive and capitalist control of industry became dominant was precisely the one that brought the most effective utilization of new inventions, the most extensive development of labor-saving devices, the most rapid increase in real wages, the greatest accumulation of capital facilities, and the largest total volume of production. No other period in the world's history showed such progress in public health, in medicine, in free schools, in transportation, and, generally speaking, in the means of gratifying human wants. Furthermore, the greatest progress has been made in those countries, notably in the United States, where the typical organizations of a money and profit economy have been most highly developed. 'It may be freely admitted,' according to the Webbs, 'that, with all its drawbacks, the dictatorship of the capitalist scored an initial success. It delivered the goods. It created the highly efficient machinery of ever-increasing production.' [4]

Without this machinery, created and saved under the urge of the profit motive, we should not now have the *possibilities* of higher standards of living. There would be no point to our present inquiry concerning the means of using our agencies of production continuously to better advantage; for this vast capital would be an aim and a hope, rather than a reality and a problem. The question whether such Aladdin-like achievements would have been possible under any other industrial régime, and the question to what extent they resulted from causes other than the profit motive, we are not now discussing. We are merely stating the facts. These achievements — real,

unprecedented, unquestioned — were in large part the outcome of the efforts of men who were seeking business profits.

No Other Motive has been widely Successful

Accepted economic theory fortified these men in their belief that private ownership of capital facilities, and freedom in the use of these facilities in profit-seeking enterprises, would bring forth the largest material sources of human happiness. It may be well, as the Webbs suggest, to bear this fact in mind. The profit method of remunerating the directors of commerce and industry was not adopted out of malice. 'It was not intended to produce masses of destitute persons. It was not designed to diminish personal freedom and to lead to class oppression. It was not even devised for the creation of an hereditary class which lives by owning. The economic institutions necessary to the vocation of profit-making — private property in the instruments of production, and free enterprise in the use of such instruments — were maintained and developed by British and American statesmen and legislators during the eighteenth and nineteenth centuries, with the approval of the economists, because these men honestly believed that unrestricted profit-making by manufacturers, traders, and financiers was the most effective way of increasing the national wealth.'[5] It is still the belief of leaders of industry, economists, and statesmen generally, not indeed that *unrestricted* profit-making is essential — for, as we shall see presently, there is no such thing; but that profit-making, under such restrictions and conditions, and subject to such taxes as may from time to time become desirable, leads to the creation of greater wealth than any other feasible economic system that has ever been tried on a large scale, or even suggested.

Without the Profit Motive, Other Motives can hardly function

In point of fact, up to the present time, production and distribution on a large scale and embracing a sufficient variety of goods to satisfy consumers has nowhere been successful without the urge of the profit motive. Experience promises little more than occasional and temporary success for public ownership and control of the factors of production; and only a limited success has attended such methods of dispensing with profits as consumers' coöperative societies, productive associations of workers, agricultural productive societies, and such coöperative distributors as the Bon Marché in Paris. Such enterprises have failed mainly in management and discipline. So far, it has been impossible for consumers to organize at all for the production of many commodities, since the consumers of these commodities are scattered all over the world and buy very irregularly.[6] Moreover, as long as members of coöperative societies trade extensively outside their own stores, their freedom of choice is preserved by ordinary profit-seeking enterprisers. Their experiments, therefore, have not met one of the crucial tests, for freedom of choice, as we shall see presently, is an integral part of the economic problem.

Profits, it is true, are not the only incentives to productive activity: men do not work for bread alone. Various other motives — some of them of a high order, that should be and can be gradually strengthened — we are not overlooking. Certainly, they have a place in the industrial order that the early economists failed to give them. Senior's proposition that 'every man desires to obtain additional wealth with as little sacrifice as possible,' [7] even though it is basic and almost literally true, is not the only fundamental fact. We do not agree with Senior that it is the ultimate proposition in political

economy 'beyond which reasoning cannot go.' Reasoning must go much further if it is to take due account of all the mainsprings of the activities of men.

Nevertheless, we have no reason to suppose that all other economic motives put together can take the place of profits. The profit motive is not merely one among many: it is the one without which the others can hardly function. In the conduct of his business, a man may be actuated by many worthy aims: a desire to raise the wages of his employees, for example, or the ethics of the trade. He may wish to turn out a finer product or to reduce the selling price. He may want to make his factory an object of beauty, surrounded by playgrounds and gardens. He may say, 'I do not care about making money; I enjoy the game.' Or, he may say, 'I am in business for the service I can render, and I seek to apply the Golden Rule.' All these aims he may cherish and others just as admirable; but unless he subordinates them all, as far as need be, to the aim of making profits, his other ambitions are fruitless. He becomes a philosopher instead of a business man. He can still dream, but he cannot build. He may enjoy the game as much as ever, but he cannot play; he is retired to the side lines.

Moral sense is not a substitute for business sense. This point escapes many of the current critics of our profit economy. One of them commends a bookseller who 'spends much money trying to get people to read what he thinks are good books, announcing proudly that he is in business not to make money but to spread the habit of reading.'[8] This is nonsense. If his first aim is to spread the habit of reading, he is not in business at all; he is in philanthropy. He can ignore profits for a while only because he or somebody else has realized profits in the past; and his career as a philanthropist can last only as long as

his money lasts. It is odd that this critic and others who seek to abolish profits consider Henry Ford a benefactor of the human race. They seem to overlook the fact that Mr. Ford would be quite unknown to-day, and his humanitarian impulses quite fruitless, if he had failed to make profits. First of all, he had business sense.

It does not matter what a business man's views may be concerning a 'fair wage,' or a 'living wage,' or a 'saving wage.' It does not matter what he may think about the nobility of the profit motive; his opinions are beside the point. He is obliged to make profits his first aim — not his highest aim, not his ultimate aim, not his most cherished aim, but his first aim — for unless he does so, he is in danger of eliminating himself from the business world. He can give away all that he has; but after that he can no longer pay a living wage or any other kind of a wage. That is why the Brotherhood of Locomotive Engineers, in the operation of its coal mines, disregards the principle sometimes expounded in Congress that certain wages should be paid by railroads whether the roads earn expenses or not, and proceeds to pay its coal miners whatever wages the condition of the business seems to warrant. For a short time, it is true, a business can continue operations on the mere prospect of profits; but presently profits must be realized or the business must stop. The wisp of hay held out before the donkey will keep him moving for a while, but only for a while; unless he gets something more nourishing than prospects, he drops dead. In short, the business man who seeks to improve industrial society must not, in his altruistic eagerness, overlook the primary essential; for it is only a successful business man — a profit-making man — who can pursue his ideals with practical results in the actual world.[9]

For its own good, therefore, society should expect the individual business man to act from enlightened self-interest. Whatever restrictions upon his freedom in so acting are sure to conduce to the public welfare should be binding, legally, upon all enterprisers. Except among business men, this matter is not generally understood. Often a man is told that, irrespective of what his competitors do, he should adopt such and such a policy, not for the good of his business, but for the public good. He is called upon to raise wages, reduce prices, shorten the working day, continue production regardless of demand, and so on, solely for humanitarian reasons. But in a money and profit economy, such measures often redound, not to the benefit of the public, but chiefly to the benefit of those competitors who refuse to adopt them; and it does not help matters for those employers who have the highest humanitarian impulses to neglect profits, thereby putting themselves out of business.

Continuous Employment depends on Profits

We hear much condemnation of employers who shut down their factories and thus throw men out of work. Some of this condemnation is deserved, for in some cases better judgment and better management would render continuous operation possible. Often, however, the closing of factories is not due to the inefficiency of individual employers; nor is it due to their perversity or heartlessness. Often, employers have no option. They cannot long carry on at a loss, no matter how much they would like to do so. It takes money to buy materials and pay wages; and the money must come from somewhere. It cannot long come from capital, for most capital is in bricks and mortar and other forms that are not suitable for the payment of operating expenses. In any event, the limit to

the payment of losses out of capital is reached when the capital is exhausted.

Here is the Studebaker Corporation, for example, with a long record of substantial success, with a capital, let us say, of ninety million dollars and a surplus of twenty million. Its financial condition is exceptionally safe. Yet its freedom of action may at any time be restrained by market conditions over which it has virtually no control. Out of accumulated capital and profits, it could not pay current costs of operation more than six months. Soon thereafter, without additional income, it would have to stop producing automobiles. If no profits were realized, month after month, the time would come when the directors would have to close the factories. Humanitarian impulses would not provide new capital, or pay for steel or mechanics.

It is customary to speak of the *refusal* of employers to utilize the full available productive power of capital and labor; and sometimes the refusal is indefensible.[10] But does not the word 'refusal' generally give a wrong slant? It is true that some producers restrict output for the purpose of maintaining prices, rather than produce more and sell at lower prices, because they think that a smaller output will yield larger profits. But this can happen only under monopolistic conditions. Under typical competitive conditions, it is against the interests of any one producer to restrict *his* output in order to maintain prices, thus chiefly benefiting his competitors. As a rule, 'refusal' is not the word: most employers have no choice. They cannot control fluctuations in consumer demand. They would be ruined if, regardless of market conditions, they continued to run their plants at capacity. And it may not be out of place to remark, in passing, that workers' control of industry would not solve this pro-

blem. Economic democracy cannot repeal economic law. Nor would the problem be solved by the elimination of profits. It would still be both impossible and undesirable to operate every part of our industrial equipment at capacity. Every day, somebody would have to decide what part of our equipment to leave idle: somebody would have to make the 'refusal.'

In one of his condemnations of capitalism, Werner Sombart says: 'The beginning and the end of capitalist economic activities is a sum of money. Consequently, calculation forms an important element in the capitalist spirit, and this was recognized quite early in the history of capitalism. By calculation I mean the tendency, the habit, perhaps more — the capacity, to think of the universe in terms of figures, and to transform these figures into a well-knit system of income and expenditure. The figures, I need hardly add, always express a value; and the whole system is intended to demonstrate whether a plus or a minus is the resultant, thus showing whether the undertaking is likely to bring profit or loss.'[11] With all this we agree. Deplorable or not, it is necessarily true. A successful business man is much more than a calculating machine; but, as we have said, he is first of all a good enough calculating machine to keep his balance sheets out of the red.

Nearly all Ways of making a Living depend on Profits

There are many ways of making a living, but nearly all of them are predicated on realized profits. A majority of human beings, it is true, depend upon wages; but wages depend largely upon profits. Employers, as a rule, pay wages only with the expectation of making profits; and, unless these expectations are realized, wages *must* stop. In this connection, we quote a definition of capitalism:

'By the term capitalism, or the capitalist system, or, as we prefer, the *capitalist civilization*, we mean the particular stage in the development of industry and legal institutions in which the bulk of the workers find themselves divorced from the ownership of the instruments of production, in such a way as to pass into the position of wage-earners, whose subsistence, security, and personal freedom seem dependent on the will of a relatively small proportion of the nation: namely, those who own, and through their legal ownership control, the organization of the land, the machinery, and the labor-force of the community, and do so with the object of making for themselves individual and private gains.' [12] This is a defective definition. Not only is it possible, under capitalism, to have widespread distribution of ownership of the instruments of production among the workers, but, as we shall show presently,[13] the capitalistic civilization of to-day is making, and should continue to make, progress toward that end. It is another defect in the definition, however, that concerns us at this point. Rarely are wage-earners as a body dependent on the *will* of employers. Employers, as a rule, are not only *willing* but eager to pay wages. Workers as a whole are dependent on nobody's will, but on the capacity of the enterprises for which they work to continue to operate at a profit.

The General Electric Company, for example, out of every dollar of income, pays out as wages about forty-one cents, and as cash dividends only about five cents. (See Figure 35, page 264.) Now, it is the forty-one cents that makes the five cents possible; but, none the less, it is the five cents that makes the forty-one cents continuously possible. In the year 1914, the company paid about thirty-seven million dollars as wages; in the year 1920, it paid nearly one hundred and twenty-eight million dollars,

Had there been no profits, there would have been no such increase in wages; in fact, no General Electric Company. The total income of the United States in the year 1918 was about sixty-two billion dollars. Of this total, over half, or about thirty-two billion dollars, was received as wages and salaries.[14] Of this amount, a small part was paid for personal services, with no possibility of profits; a considerable part was paid by those who hoped for profits, but hoped in vain. Most of this thirty-two billion dollars, however, was paid by those who had good reason to expect, and who did in fact receive, sufficient profits to enable them to continue in business. This means that wages, which are the chief economic incentives of most of the workers in the United States, continue to function only as long as somebody makes profits.

Indeed, there is scarcely a human being, wage-earner or not, in all the wide ranges of this country, whose daily life is wholly unconcerned with the balance sheets of business enterprises. Even Thoreau, in the seclusion and simplicity of his hut on the shore of Walden Pond, depended more than he was willing to admit on the products of the profit-making society which he was trying to escape. John Burroughs, simple as were his tastes, keen as was his delight in the meadowlark and the goldenrod, owed much of his joy in life, say nothing of his bodily comfort, to mills and mines, book shops and plantations, factories and railroads, that ministered to his material welfare only as long as they realized profits. The lonely trapper in the forests of the Northwest, although he does not work for wages and calls no man master, can supply himself with no other rifles and shoes and newspapers and flour than men have succeeded in making under a profit economy. When he goes to the nearest village, he finds little to buy, ordinarily, except goods that have been produced at a

profit, transported at a profit, and which the local merchant can sell at a profit. Few other goods can flow into that market, because of the almost automatic operations of a money and profit-making economy. In short, profits and the prospect of profits, but mainly realized profits, determine what there is to be bought and who is allowed to make it.

Conclusion

This foreword to our discussion of profits is not offered in justification of industrial society as it exists to-day. Complete justification is impossible. Even the directors of 'big business,' although convinced that our material prosperity requires the profit incentive, are far from complacent. They are as eager as any revolutionist could be to bring about changes that will increase the real wages of labor. Almost any kind of radical doctrine can find its advocates among Wall Street leaders; and no one can be wholly satisfied unless his complacency is rooted in ignorance.

To defend a majority of profit-seekers for what they do under existing conditions is not to defend those conditions; and to defend a majority of profit-seekers is not to defend all. Neither here nor elsewhere do we set up a sweeping defense of profits, however made and however utilized. There are many kinds of profits and many ways in which profits may be used, differing vastly, as we hope to show, in their effects on the common welfare. We cannot condemn or justify them all on the same grounds. And there are debatable questions, beyond the scope of these introductory remarks, concerning the size of profits and the extent to which they should be taxed. If the existing price and profit economy seemed to us satisfactory or, if not wholly satisfactory, at least without

very serious defects, we should not be writing about it. As any one who has read *Money* is well aware, we have in mind many problems that must be better understood before the productive activities of mankind can be so directed and the products so distributed as to yield to the people generally the greatest possible benefits. With some of these problems that center around profits, we shall be concerned in the following chapters.

CHAPTER III

VARIOUS KINDS OF INCOME

WHAT are these economic problems that center around profits? Obviously, they are concerned with the relative incomes of capital and labor. Less obviously, but not less vitally, they are concerned with the influence of profits and their distribution on the circulation of money, on the balance of supply and demand, and on unemployment. Rather obscurely, but essentially, as we shall see, they have to do with the possibility, in any other than a price and profit economy, of preserving consumers' freedom of choice and eliminating the unfit among business enterprisers. In general, all these problems deal with the different effects upon material wealth and human welfare of various methods of making and disbursing profits.

Clearly, then, we are about to grapple with some of the real issues in current political upheavals and industrial experiments. So absorbing are all these questions that we are loath to delay our discussion long enough to define its terms. But we shall save time if we make sure that we understand what we mean by money and income, wages and profits, wealth and capital, prices and the price-level, supply and demand. The fact that these are terms of everyday speech should make us all the more wary about using them vaguely. They are beset with economic pitfalls.

This chapter, then, may well be devoted to an explanation of these terms, uninteresting, perhaps, but necessary. We do not ask any one to accept our definitions. All we ask is that those who persist beyond these dull preliminaries shall bear in mind that we endeavor to use these terms consistently, throughout the volume.

Economics

Economics is the science that deals with human interests from the standpoint of price. This definition covers not only the production and distribution of commodities and services, but all other human interests, in so far as they are measured in terms of money. The fundamental characteristic of every science is a close approximation to exact measurements. Each science is known by its point of view and its consequent units of measurement. Mechanics measures an engine in terms of horse power, and dietetics measures an egg in terms of calories; while economics measures both engines and eggs in terms of dollars. Without such a measure, there would be no science. For this reason, we consider money the central and unifying feature of the science of economics.

Money

By 'money' economists sometimes mean anything that is (1) passed from hand to hand throughout a community in payment for commodities and services, and (2) regularly taken with the intention of offering it in payment to others, and (3) customarily received without assay or other special test of quality or quantity, and (4) received without reference to or reliance upon the personal credit of the one who offers it. To cover all this, we shall use the term 'currency.'

The term 'money' we shall use throughout our discussion, in accordance with the everyday practice of business men, to cover not only all forms of currency, but bank credit as well. By 'bank credit' we mean deposits transferable by check. It is important to bear in mind that 'money' always means 'circulating purchasing power' and always includes both currency and bank credit.

Goods

As profits are derived from the production and exchange of goods, we shall make frequent use of that term. By 'goods,' we mean not only tangible goods, such as cotton and engines, for which we use the term 'commodities,' but also intangible goods, such as light and power; and a third source of human satisfactions, such as the work of teachers, bankers, and motormen, which we call 'services.' Economic goods, then, consist of commodities, both tangible and intangible, and services.

Money versus Wealth

In two opposite ways, money has been a source of confusion to economic thought. First, men attached to money a kind of importance which it did not possess. They regarded money as a kind of national wealth which, like any other kind of wealth, increased in value as its quantity increased. Later, after the fallacy of this first position had been exposed, money came to be regarded as relatively insignificant. Thus, at first because its importance was overestimated, and later because its importance was underestimated, money has been a stumbling block in the way of an understanding of economic processes and results.

It is important to keep in mind the distinction between money and other forms of wealth. From the standpoint of an individual, money is regarded as wealth, for it is a command over the objects of wealth. The more money an individual has, the better off he is, economically. It is not true, however, that the more money a nation has, the better off it is. The material wealth of a nation — the 'real wealth' — is its wheat, factories, railroads, mines, forests.

In our study of profits, this distinction between money

and other forms of wealth is important. It makes a vast difference, and one that is sometimes perceived too late, whether profits are in dollars or in leather.

Income

There are four agents of production: land, capital, labor, and organization. The income of these four agents is received in the form of rent, interest, wages, and profits. Ordinarily, rent, interest, wages, and profits are all paid in money. Outside the domain of commerce, it is true, the income of many persons — farmers, teachers, and household servants, for example — consists in part of things other than money. Net business income, however, is the amount of money accrued less the amount of money charged to expenses; and it is mainly with net business income that we shall be concerned. By the term 'income,' therefore, unless otherwise stated, we mean money income.

Whether we are considering money as a whole, or wages, or profits, it is the circulation and not the reservoir that is most significant.[1] This points to an important difference between income and capital. Income, as the name implies, is a flow; capital is a fund. Accordingly, we always speak of the income of a given *period* of time, but of the capital existing at a given *instant* of time. Thus, the annual report of a corporation gives the capital account as of December 31, but the income account of twelve months.[2]

Real Income versus Money Income

A man's real income consists of goods. The scales show how many pounds of beef he brings home for dinner, but he does not eat the scales; and this relation between scales and a real meal is precisely the relation between

dollar income and real income. Money is a measure of his real income. This week it may comprise three quarts of milk, police protection, a daily newspaper, and so forth, to the end of a long list of commodities and services. But if you asked him the size of his income, he would not proceed to enumerate these real items. He would sum it all up by saying, 'Fifty dollars a week,' because he habitually measures income and all other strictly economic matters in terms of money. Nevertheless, real income, not money income, is the economic source of his satisfactions; and this source can be increased or decreased by changes in his pay envelope only in so far as these changes modify his effective demand in the markets, that is to say, his command over goods. In other words, it is the bread, hats, tires, medical care, entertainment, and the like, that he buys with his wages, and not the dollars, that constitute his 'real wages.' Accordingly, when we speak of a man's 'wages,' we mean money wages; but when we refer to the goods that his money wages will buy, we use the term 'real wages.' It is important, though sometimes difficult, to keep this distinction in mind.[3]

Between the real income and the money income of a nation, there is a similar difference. The money income of the people of the United States, for example, in the year 1913 was about 33 billion dollars. By the year 1919, it had grown to nearly 67 billion dollars. But in order to measure the change in the goods income of the nation, we must correct these figures for changes in the purchasing power of the dollar. When we make these corrections, we find that the difference in *real* income between 1913 and 1919 is represented, not by 33 and 67, but by 33 and 37.[4]

The money income of a nation is the sum total of all the individual money incomes. That sum total can be increased very easily. Germany had no difficulty in making

a trillion marks grow where one grew before; but not a trillion blades of grass. While the printing-presses made millionaires of everybody, the mines and farms and factories did not keep up the pace. The money income of the nation rose while the real income fell. Regardless of what happens to rent, interest, wages, and profits, the total real income of a nation in any year is the total of commodities and services produced or received during that year.[5]

Profits

From the gross income of any business, all the expenses must be paid, including rent of land, buildings, machines, and so forth, interest on money, wages of labor, and wages of management. The money income that is left over, if any, is *profits*, or *pure profits*. This is the only sense in which we shall use the term 'profits.'

Sometimes, the term *gross profits* or *ordinary profits* is used to cover all income that is disbursed as interest, rent, and wages of management, together with all that is left over. Sometimes the term *business profits* is used to cover *wages of management* and *pure profits*.

Obviously, no business could long continue without sufficient income to pay rent, interest, and wages of management. For this reason, the amount necessary to cover these three items is sometimes called *minimum profits*. The uses of all these terms are shown in the diagram.

It is only recently that profits have been clearly segregated, as in our use of the term, from interest and from wages of management, and studied as a distinct problem. That problem arose out of the development of the modern corporation, with its hired executives, as the dominant form of business enterprise. Formerly the typical concern was one in which the manager furnished

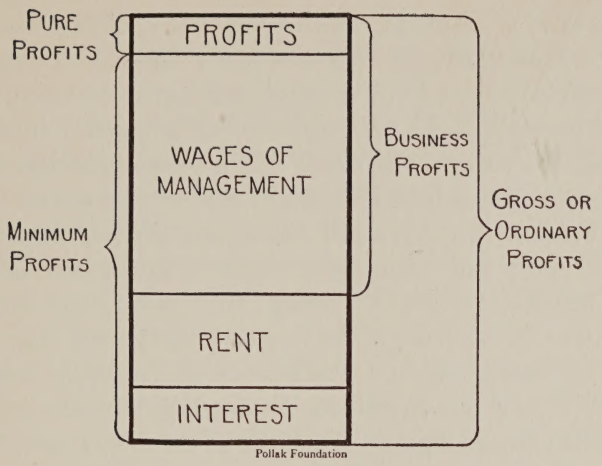


FIGURE 1. PROFITS

the capital; and little attempt was made to distinguish between his reward as a capitalist and his reward as a manager. Nowadays, the typical enterprise is the corporation with its paid executives and borrowed capital. And even where the managers are the sole or chief owners of the capital, income taxes have brought about a sharp differentiation between their rewards as executives and their rewards as shareholders.

Wages are unlike profits in this important respect: wages are paid *in advance*, whether any profits are realized or not, whereas profits are paid only *after* they are realized. All business costs, including wages, are advances made in the expectation that selling prices will yield profits. Frequently, as we shall see, that expectation is not well founded.[6]

Profit the Difference between Two Variables

Profit or loss, then, is the difference between cost and selling price. It is usually impossible, however, to tell in

advance of production what either the cost or the selling price will actually be; for the most careful calculations that can be made in advance are at best only estimates. Consequently, it is impossible to tell what the difference between these two variables will be, and whether it will be a plus or a minus quantity, a profit or a loss. This fact, though it may seem plain enough, is often overlooked, with the result that there is much confusion of thought concerning government regulation of profits, the obligation to earn no more than a 'fair profit,' the feasibility of conducting business at cost, and kindred matters.

It will pay us, therefore, to note carefully what this fact means to business. It means, in the first place, that a profit or loss is inevitable; since, according to the laws of probability, there is not one chance in many thousands that these two variables — cost and selling price — will turn out to be exactly even. In other words, there is virtually no possibility of conducting business exactly at cost, so that the outcome will be neither a surplus nor a deficit. For, if there is sufficient leeway between the two variables to make the covering of cost virtually certain, there is sufficient leeway to make almost as certain the realizing of a profit. So, also, if any business were conducted in such a way as to preclude the possibility of a profit, almost inevitably that business would suffer a loss.

In the second place, and for the same reason, there is no way whereby an enterprise can be carried on at a fixed rate of profit. To be sure, the Government can forbid an industry to retain more than six per cent of profit already earned, and can appropriate all earnings above that rate, as it does in the case of the Federal Reserve Banks; but it cannot establish conditions under which an industry is unable to earn more than six per cent without

making virtually certain that it will earn less. No matter what rate we may call a 'fair profit,' therefore, it is impossible to conduct business at exactly that rate. Any plan of administration which guarantees that railroads, for example, or labor banks, or even electric light companies, will earn six per cent, virtually guarantees more than six per cent; and, except for the remote mathematical chances already mentioned, any plan which makes a profit of *more* than six per cent impossible makes a profit of six per cent impossible. The practical significance of all this is that few people would put money into a business unless there was a good chance of getting it back — of coming out even; but there cannot be a good chance of coming out even, unless there is a fair chance of coming out ahead.

Private Profits versus Community Gain

Private profits may or may not mean community gain. As a rule, they do. Mr. Ford, while accumulating vast individual profits, has provided the community with ten million automobiles and with valuable instruments of production. Both the cars and the capital are to some extent community gain. What Mr. Ford has done on a gigantic scale and with the applause of the people, hundreds of thousands of enterprisers have done on a small scale, though not always with popular approval. They have increased the productive resources of the country and thereby the possibilities of higher standards of living. No matter who owns all this new capital, it is in part a community gain.

On the other hand, individuals may realize profits without benefiting the community. In so far as they profit by buying and selling unimproved coal lands, by manipulating the stock market, by floating securities of useless cor-

porations or by destroying needed enterprises, they make gains, but the community does not. Evidently we cannot tell what is sound public policy in matters of taxation and business regulation until we distinguish between those profit-making enterprises which add to community wealth and those which do not.

Prices versus Price-Levels

Throughout our discussion, we must take pains to keep in mind the distinction between individual prices and the general price-level. Otherwise we shall be in danger of confusion. By 'individual prices,' we mean the exchange value of any commodity or service — say a ton of coal or a ride in a taxicab — in terms of dollars. By 'the general price-level,' we mean a composite of all prices; that is to say, the cost of coal, taxicab rides, and everything else at one time or place, compared with the cost of the same commodities and services at another time or place.

Such comparisons we make by means of index numbers. Thus, if we arbitrarily take 100 to stand for the wholesale commodity price-level of 1913, and we find that by May, 1920, the level has risen 147 per cent, the index number of wholesale commodity prices has become 247. (See Figure 2, page 80.) This tells us nothing, however, about the change in the price of leather or any other commodity. It may have risen more or less than 147 per cent; or, by an extraordinary combination of causes, it may have risen exactly 147 per cent.

The paramount interest of every community in the price-level is clear and indubitable: where the price-level happens to be is a matter of little consequence; the one thing needful is that it should stay about where it is.[7] The interest of the community in individual prices — that is to say, in the relation of prices to each other on a given price-level — is not so obvious. Concerning that

subject we shall have something to say when we come, in Part IV, to our discussion of the functions of price.

The Forces of Supply and Demand

'Supply' is used throughout this volume to denote the quantity of commodities or services offered for exchange at a given time and place, and at a given price. 'Demand' indicates *effective demand;* that is to say, not merely desire, but desire accompanied by money or its equivalent; and demand, like supply, always refers to a given time, and place, and price.

There are three fundamental tendencies:

(1) When, at the prevailing price, demand exceeds supply, the price tends to rise, and *vice versa.*
(2) At a higher price there is likely to be a smaller demand and, sooner or later, a larger supply, and *vice versa.*
(3) Price tends toward the level at which quantity demanded is equal to quantity supplied.

It is to these three tendencies that we shall refer whenever we speak of the forces of supply and demand. Various causes, under various conditions, offset these tendencies. With certain qualifications, the three forces apply, not solely to the prices of commodities, but also to the price paid for the use of capital, which we call 'interest'; and to wages and to all other remuneration for services.

So much for definitions. And now we trust that the adventurous reader who has persisted through these dull preliminaries, and still has the courage of his quest, will try to keep all this in mind, to the end that the path he is about to take, into one of the obscurest parts of 'the dismal science,' may be less dreary and difficult than otherwise it would surely be.

CHAPTER IV

VARIOUS SOURCES OF PROFITS

We cannot hope to arrive eventually at any dependable answer to the question to what extent various profit-making enterprises result in economic gain or loss to the community, unless we start with an analysis of the sources of profits. Evidently they are many and various. Evidently they have different effects on human welfare. Nobody contends that the profit-making ventures of the manufacturers of 'Shredded Wheat Biscuit' and the manufacturers of the 'Guaranteed Cancer Cure' are equally good from the social standpoint. Nobody either condemns or condones, on the same grounds, the profits of bootleggers and bootblacks. For practical purposes, therefore, we must distinguish carefully among various ways of making profits. No matter what our views may be concerning the established money and profit economy, no matter what social programs we may seek to defend or discredit, we shall do well to take as fully into account as possible the diverse nature and consequent diverse effects of multifarious profit-making enterprises. And we shall find that it is necessary, for this purpose, not only to consider the origin of profits, but also to study the factors that account for the varied fortunes of different concerns in the same type of industrial endeavor. This may help us to avoid those fallacies which result, in every branch of learning, from lumping together indiscriminately things which, for the purpose at hand, are essentially different.

Sources of Income

Money spent for commodities to be consumed is the force that moves all the wheels of industry. Sustained business prosperity, therefore, depends primarily on the right flow of money into consumers' hands.

Individual consumers derive their money incomes from the following sources:

Wages and salaries (of employees)
Wages of management (of entrepreneurs)
Government payments (wages, salaries, pensions, bonuses, interest, etc.)
Insurance payments (annuities, etc.)
Gifts
Inheritance
Fraud (theft, forging, graft, etc.)
Gambling
Interest
Rents and royalties

Profits (of entrepreneurs)
Dividends (paid by corporations)

From all the other sources of consumers' income in this list, we have separated profits of entrepreneurs and dividends paid by corporations, because these two sources are the center of our present interest.

Sources of Profits

Profits result from many factors, among them low costs of production, low costs of distribution, and increases in the prices of commodities, land, securities, and franchises.

Profits are made in many ways, among others in connection with financing by banks, by trust companies, and

by investment houses; selling commodities, securities, royalties, patents, and land; services of physicians, attorneys, and entertainers; insuring; and transporting.

In order that there may be any profits, demand must be large enough in volume and high enough in price. Among the factors which determine the demand for a given commodity or service are the following: habit, fashions, social customs, taboos, superstitions, wars, earthquakes, floods, pests, weather, climate, purchasing power of consumers, bodily needs, education, religion, population, and advertising.

Some profits are due to relatively low costs of production enjoyed by certain producers on account of advantages over their competitors with respect to capital facilities, transportation facilities, geographical location, community growth, ownership of raw materials, ownership of patent rights and processes, size of business, labor supply, and management.

Evidently the factors which determine profits are many, various, elusive, often fortuitous. This outline, though only a beginning, is enough to suggest the great complexity of the subject, and the impossibility of setting up a just defense or indictment of a profit economy on the basis of a simple analysis of sources of income.

Income from doing and Income from owning

To base the indictment on the distinction between 'income from doing' and 'income from owning,' as the Webbs have done in *The Decay of Capitalist Civilization*, is to take no account of a far more important distinction. In our view, the main issue does not arise out of the distinction between income from owning and income from doing. Rather, it concerns the effect on social welfare of various ways of making a living, whether by doers, or by

owners, or by the members of the largest economic group of all, including the farmers, who are *both* doers and owners. If human welfare is our aim, our chief concern over income is not its source, but its effect. It matters little how much of Mr. Henry Ford's income is from owning and how much from doing. It matters greatly what the net result is in human welfare. No economic fact thrusts itself more insistently and more disagreeably upon our attention than that some doers gain large incomes by means of anti-social activities. On the other hand, no fact is more patent than that some profit-making owners use their property for the good of society. When, however, all rent, interest, and profits are thrown into one category and indiscriminately condemned as rewards for mere owning, that distinction is lost which transcends all others in importance.

Economical and Uneconomical Sources of Income

As a matter of fact, it is exceedingly difficult to divide all income-producing activities into those which are beneficial and those which are injurious to society. The following attempt (see page 40) illustrates the difficulty.

This is a suggestive analysis of sources of income. It is not, however, a logical classification. Some of the activities that are listed as 'destructive' are not always subversive of the material welfare of mankind; and some of those that are listed as 'economical' are at times opposed to material welfare. What is commonly called the adulteration of goods, for example, is sometimes, from the viewpoint of society, a net economic gain. To save the wool from rags that would otherwise be wasted and make it available for new cloth, whether we call the product 'shoddy' or re-worked wool, is to increase the community wealth. Again, no matter what we may think about

WAYS OF GETTING A LIVING[1]

- I. Uneconomical
  - 1. Destructive
    - War
    - Piracy
    - Plunder
    - Swindling
    - Counterfeiting
    - Adulteration of goods
    - Monopolizing
  - 2. Neutral
    - Marrying wealth
    - Inheriting wealth
    - Benefiting through a rise in land values
- II. Economical
  - 1. Primary Industries
    - Farming
    - Mining
    - Hunting
    - Fishing
    - Lumbering
  - 2. Secondary Industries
    - Manufacturing
    - Transporting
    - Storing
    - Merchandising
  - 3. Personal or Professional Service
    - Healing
    - Teaching
    - Inspiring
    - Governing
    - Amusing, etc.

(From Thomas Nixon Carver, *Principles of Rural Economics*, Boston, 1911; p. xx.)

monopolies in general or the necessity of legal restraint, the facts will not permit us to classify all monopolies as destructive. Some of them have resulted in larger output and lower unit prices than would have resulted from freer competition.

Similar difficulties confront us when we attempt to place 'marrying wealth' and 'inheriting wealth' among the ways of getting a living. From the community standpoint, they are never 'neutral.' Sometimes they result

in economic gain, sometimes in economic loss. This is also the case with industries and services. Not all mining companies produce as much wealth as they destroy. Not all hunting and fishing and farming is 'economical.' Even the income-yielding services that belong in the categories of healing, teaching, inspiring, governing, and amusing are in part destructive. Some of them are as properly called swindling as the operation of bucket-shops. They may be even more injurious to society, economically, than piracy and plunder. In short, whenever we group large numbers of individual enterprises under such general categories, we inevitably throw together some activities that promote and some that obstruct economic progress.

We do know that, at least in the United States, the combined result of all these activities, uneconomical and economical, is larger per capita wealth and larger per capita real income than we used to have; but we do not know how many of the individual enterprises, in manufacturing and in merchandising, for example, should be bracketed as destructive and how many should be bracketed as constructive. Evidently, it is not easy to classify all sources of income, individual and corporate, with reference to their effect on economic welfare. Certainly, we cannot do so by calling all income from doing beneficial to society and all income from owning injurious.

Profits may be due to Chance

If a man wins by staking his money at Palm Beach on the fall of the cards, his gains are not profits, according to our use of the term. Some of the gains, however, that are properly called profits result, like the gains of gamblers, wholly from chance; that is, from occurrences wholly beyond the control or prediction of those who benefit by

them. Such are the profits of a man who buys a ranch, with no thought of using it or selling it for anything but a ranch, and then finds that it is rich in oil. In the same category belong the exceptional gains of the man who, just before a declaration of war, buys ships for use in ordinary trade channels, and then sells them for transports of war. Most of the profits which result from a rising price-level, as we shall see presently, are profits of chance. Indeed, every one has observed men who profit from 'bull luck.' Every one knows not only of men who sow where they do not reap, but also of men who reap where they do not sow.

All profits result partly from chance. This truth is not so commonly observed. It is easy to see that some profits owe their origin solely to sheer luck; but it is not so obvious that there are no profits due solely to sheer merit. As a matter of fact, it is not possible to find a business success which can be wholly ascribed to the labor, ability, wisdom, and devotion of those who have it in charge. The outcome of every enterprise is to some extent dependent on changes in weather, population, tastes, legislation, and other factors which those responsible for the undertaking can neither control nor accurately forecast. All business is subject to some of these risks, and all profits and losses result from taking risks.

PART II
THE NECESSITY OF PROFITS AND LOSSES

CHAPTER V

PROFITS AND LOSSES RESULT FROM RISKS

Risks are universal. For the orange grower, there is danger of a frost; for the cotton planter, the boll weevil; for the bond buyer, inflation; for the woolen manufacturer, tariff revisions; for the milliner, changes in style; for the contractor, strikes; for the railroads, Congress. The prospector drills where there may be no oil. The publisher prints a book that people may not buy. The clothier relies on spring stocks that may not arrive. The electric railway company constructs a road that the coming of the automobile may render useless. The producer of phonographs may lose his market to the radio. So it is the world over. Every branch of business enterprise faces not only risks that are the common lot, but also risks that are peculiarly its own.

These risks are of such scope and magnitude that at times they are successfully encountered by fewer than half our organized business enterprises. For the year 1921, 185,158 corporations in the United States reported to the Treasury Department no net income whatever. Indeed, over half the concerns engaged in trade, and over three quarters of those engaged in mining and quarrying, reported deficits. In the manufacturing group, only thirty-seven thousand succeeded in closing the year with any net income; more than forty-two thousand did not succeed. The total deficit of all the corporations that reported no net income was nearly four billion dollars.

What induced these 185,158 corporations to carry on enterprises which yielded them, as a reward for a full twelve months of effort, nothing but this huge deficit?

The answer is found in the record of the 171,239 other corporations that succeeded, during the same year, in realizing a net income of more than four billion dollars. All the reporting corporations, the successful and the unsuccessful, ran the risk of suffering losses in the hope that they might make profits. Both the losses and the profits resulted from taking risks.

The year 1921, it is true, turned out to be an exceptionally hazardous year for business; but it did not differ from any other year in forcing every enterpriser to encounter risks. No business man is ever free to decide whether he will or will not escape these dangers. He can usually choose among risks; but choose he must. Profit is his reward for choosing wisely.

A profit economy is indefensible, it is said, because profits are 'something for nothing.' 'What happens,' says Professor Harry F. Ward, 'when the net surplus of an enterprise is appropriated as profit by one participant or set of participants is that they have secured an advantage over the others and thereby obtained something for nothing. These are the essential elements in profit.' [1] Here we have a fundamentally false assumption. Any discussion based upon it is necessarily misleading. The essential element in profit is not the acquisition of something for nothing, but the reward for risk. He who lends what he owns — machines, buildings, money wherewith to buy them, money to advance as wages, in short, capital in any form — contributes something and runs the risk of losing it. If, instead of losing what he thus lends, he gains a profit, it cannot be said that he has obtained something for nothing. A farmer who lends his tractor or his money to a neighborhood enterprise, and receives part of the income as a reward, knows that he is not receiving something for nothing. An engineer who

deposits his savings in a Brotherhood bank does not regard the interest he receives as something for nothing. There is no essential difference between lending a man capital goods and lending him the money wherewith to buy capital goods. And there is no essential difference between lending to one man and lending to an organization of men. Nor does it matter whether the organization is called a bank, or a coöperative society, or a corporation. In every case there is risk of loss. To induce any one to take that risk, there must be a prospect of gain. If the gain is realized, it is not 'something for nothing'; it is a reward for risk-bearing. And every business man must run risks.

Every woolen manufacturer, for example, must buy wool. If he buys wool to-day, he may buy on a falling market; if he does not buy to-day, he may be forced to buy later at a ruinous price. If he borrows money in order to buy wool, he may not be able to pay the interest; if he postpones buying, he may not be able to get the wool. Again, he must either use what equipment he has, or supplant it with new; and either course may enable competitors to undersell him. If he invests in advertising, he may fail to get his money back; if he does not advertise, he may fail to sell his product. If he opens new mills where labor costs are lower, he may incur expenses which more than offset the gains; if he stays where he is, producers in more favored localities may take away his customers. He may allow his credit department to cut down the risk of bad debts at too great a loss of sales; on the other hand, he may allow his sales department to extend his markets at too great a risk of bad debts. Every day he must make decisions. Always they are decisions to run certain risks instead of others. Postponing a decision is itself a risk. In short, every business man is

beset on all hands by risks; if he runs away from some, he is sure to run into others.

Business Risks are not Gambling Risks

Still further to emphasize this point, let us distinguish sharply between business risks and gambling risks. Business risks are inherent in the nature of economic enterprise. They must be assumed by somebody. The farmer does not create the risks that are associated with pests and the weather and shifting price-levels and foreign competition and uncertainties of transportation and fluctuations in consumer demand. Either the farmer himself assumes all these risks or, by means of various kinds of insurance, he shifts some of them to others. This is equally true of the risks that are assumed by the prospector, the miner, the manufacturer, the merchant, the contractor, and the common carrier. Unless somebody runs these risks, mankind will have to go without bread and oil and tools and shoes and houses.

In the construction of a stadium, numerous risks are involved: the risk of injury to workmen, for example. This risk is part and parcel of the enterprise; somebody has to carry it. But nobody has to bet on the outcome of a game; it can be played even if no money is staked on the score. In placing a bet, the gambler *creates* a risk; in placing an employers' liability policy, the insurance company *takes over* an existing risk. Gambling, in short, is taking chances on artificial risks. Such risks, at Monte Carlo or elsewhere, are not a necessary part of business enterprise. Economically, society does not care whether the race-track gambler bets on Fire Fly, or on Spark Plug, or on neither. The world would be at least as well off if nobody ever took such risks. Unlike business risks, they are created for the sake of the risks themselves.

Speculators usually deal in Business Risks

Whatever may be true of speculators in securities, speculators in the products of industry do not create all the risks they bear; they carry risks that somebody must carry. It is true that they do not always take delivery of the goods they buy. On the cotton exchanges of New Orleans, for example, many traders deal in cotton who never handle it. They merely take chances on the future price. If they buy cotton to-day, to sell six months from now, in a sense they bet that the price will then be high enough to yield a profit. If they sell cotton short to-day, they bet that the price, when they have to make delivery, will be low enough to yield a profit. But if this is gambling, so is every purchase for sale at an unknown price; and this covers nearly all the commitments of nearly all other dealers. They do not know at what price they can sell their goods. To call them gamblers is to confuse them with risk-takers, such as bucket-shop operators, who have no function in the economic organization of society. In a bucket-shop, two men, neither of whom owns a certain stock, or ever intends to own it, make a bet concerning the future price of that stock. There is no need for *anybody* to carry such risks. Cotton speculators, on the other hand, whether or not they perform other functions, render a real service in shouldering risks that are inherent in the nature of business.

A Static Society would have No Risks and No Profits

Risks are universal because human beings are what they are, because human society is progressive. In a static state — in what Ricardo called a state of natural adjustments — there would be no risks. By natural rates of wages, interest, and profits, the early economists meant the rates that would prevail in a society that was perfectly

and finally organized, and therefore free from the uncertainties that go with progress. 'Reduce society to a stationary state,' says J. B. Clark, 'let industry go on with entire freedom, make labor and capital absolutely mobile . . . and you will have a régime of natural values.'[2] In such a society, natural rates would be static rates; prices would never fluctuate; business forecasters would be needless. One economic chart would be sufficient for all time, and all its lines would be 'normal.' As the present would be a perfect guide to the future, there would be no chances to take; therefore no risks, therefore no reward for risk-taking. In short, a profit economy could not exist in a static society. But such a society is a pure abstraction; without change, there would be a complete relief from economic risks, but, alas, no human beings to enjoy the relief.

The fact that society is dynamic rather than static does not, however, account for profits and losses. They do not arise because changes take place, but because changes are unpredictable. Eclipses of the moon are not business risks. If all changes took place in accordance with known law, all changes would be taken into account, along with other known factors; there would be no uncertainty and therefore no profit. Only those changes that make the future uncertain give rise to profit.

No Business Risks are accurately Measurable

Some writers attempt to draw a distinction between risks that are measurable and risks that are not measurable. According to their theory, profit is the result of risk, but only of risk which cannot be measured.

This distinction seems to us to have no scientific basis, and to be confusing rather than clarifying. The fact is, no business risks can be measured accurately; on the other

hand, all business risks are susceptible of some kind of measurement. The question which concerns us, either as scientists or as business men, is not whether a risk can or cannot be measured, but the probable error in our measurements. If, by a 'measurable risk,' we mean one that can be measured with absolute accuracy, a measurable risk is a contradiction of terms. If a grocer could contrive to measure *accurately* his chances of loss from theft, or falling prices, or bad accounts, these would be known factors in his business outlook, and not risks at all. But exact measurement, even in the most 'exact' sciences, is impossible, for the best instruments of measurement that men can devise fall short of perfection. There is always error: the only practical question concerns the range of the error. In business usage, the term 'risk' is generally and properly used to cover not only uncertainties, such as the chances of loss by fire, that for a sufficient number of cases may be measured with a high degree of accuracy, but also uncertainties, such as the chances of change in the style of women's hats, that at first sight seem hardly susceptible of any measurement at all. It is not possible to draw a line between risks that are measurable and those that are not.[3]

Some Risks can be covered by Insurance

Some risks, such as the danger of loss from theft, tornadoes, and strikes, are measurable with such a degree of accuracy that the enterpriser can insure against them. That is to say, he can transfer most of the risk to an insurance company. Insurance is merely a means of prorating the losses of a group among the individual members. Thus each individual accepts a certain loss, namely, the premium he pays, rather than run the risk of a much larger loss.

There was a time, as in the days of Antonio's hazards and Shylock's bond, when robbers and pirates made the transportation of goods a thrilling adventure. In those days, the individual merchant ran a great risk of losing his entire shipment. His profit, if any, was to a considerable extent the reward for taking this risk. To-day, however, the chances of having merchandise stolen en route are so well known that any one shipper can have the main risk carried for him by a dealer in such risks, even by the Government, in so far as he ships by parcel post. He has left on his own shoulders little more than the risk of insolvency of the insurer and the risk that he will have trouble in collecting.

This is true of all business risks in which the actuarial chances of loss can be measured with no great margin of error. All such risks, the enterpriser can transfer to others. Thus a taxicab company can insure against losses due to collisions, and 'The Greatest Show on Earth' can insure against losses due to rainy days. In the same way, a bank can protect itself in part against defaulting tellers, and a firm against losses due to the death of members of the firm. Such insurance becomes possible through the grouping of cases. Although the risk involved in a single case is usually highly problematical, the combined risks of a large number are not. No honest hotel proprietor has any idea whether his building will burn down to-day, or next summer, or never; but an expert actuary can tell just about what the combined fire losses of a thousand hotel proprietors will be. All such losses can be predicted according to the laws of chance. As the number of cases increases, the chance of error in prediction approaches zero.

In such cases, therefore, the risk of loss can be all but eliminated. As far as mortality rates are concerned, the risk run by a large insurance company in the United

States is negligible. There is virtually no chance that the death-rate will be as high as the death-rate upon which its premiums are based. Thus insurance not only enables an individual to transfer risks to a group, but it almost enables a group to eliminate the risks.

For the practical purposes of business, therefore, it makes little difference whether we know that certain changes will take place, or know, within a comparatively small range of error, what the probability is that those changes will take place. In the latter case the associated risks can be transferred almost entirely to a dealer in risks.

Profits result from Wise Choice of Risks

The extent to which it is possible to transfer risks does not, however, determine profits and losses. They result from risks that are assumed, whether or not these risks *can* be transferred.[4]

It is a matter of common observation that the makers of two competing products of nearly equal merit do not make equal profits. Indeed, it often happens that one producer makes substantial profits, while the other makes no profits at all. The explanation is to be found chiefly in a comparison of the risks that are assumed. If, for example, we seek an explanation for the profits of the Gillette Safety Razor Company, we find that this company, in creating a demand for its product, ran greater risks in advertising expenses than any other producer of safety razors. As another example from current business, let us take two kinds of tooth paste. The laboratory tests revealed no reason why consumers should like one better than the other. As far as the merits of the products were concerned, the makers started with equal chances of profit. Neither had any discernible advantages over the

other, except in fitness for choosing risks. Yet one turns out to be a best seller, yielding steady profits, while the other is a failure.

If a business man is too venturesome in taking risks, he loses: if he is not venturesome enough, he loses. Between these two dangers, he must contrive to find a safe middle course. He is like a baseball player who has reached first base. The closer he sticks to the base, the smaller risk he takes of being put out at first; but the smaller also are his chances of reaching second. On the other hand, the farther he plays off the base, the greater risk he takes of being caught at first; but if he is not caught, the greater are his chances of reaching second. The most successful baserunner is the one who takes such risks that the pitcher can almost, but not quite, catch him every time he takes a lead for second. The most successful runner after profits is the one who usually takes his position in the middle ground between security and excessive danger. But neither in business nor in baseball is any man infallible in his estimate of chances: if he never runs what turns out to be too great a risk — if he never gets caught off the base, or never takes a business chance that results in a loss— he is overcautious.

Every man who does any kind of business can at any time use greater caution: he can reduce some of his risks. He can do less advertising, cut down his stock, discontinue certain lines, or curtail his personnel department. He can insure against risks which he himself has previously borne. If he insures his factory against fire, he accepts the certain loss of the premium he pays, which otherwise might have been added to his profits, rather than run the risk of a greater loss from fire. In many other ways, he can narrow the scope of possible losses; but in the process he narrows the scope of possible gains. Thus, as he

reduces various risks, he increases the risk of failing to make any profits at all. If he could transfer all risks, he would transfer all dangers of loss and all hopes of profit. Every year many men fail in business because the risks they take are too great; but every year there are other men who fail because the risks they take are too small.

It is true that profits are sometimes realized on individual transactions in which the risk is negligible. Sometimes a dealer buys and sells a bill of goods at the same time, and for cash. Sometimes a builder makes a contract on a 'cost plus' basis which seems to guarantee a profit no matter what happens. Every enterpriser, however, runs the risk of not obtaining enough business of this kind to cover his operating expenses. And even when a man profits from an individual transaction which appears to involve no risk, a little thought will show that in order to be in a position to take advantage of that particular opportunity, he must have taken numerous risks in the past.

Even so, it is said, risks are not the only causes of profit; some concerns in each industry earn higher profits than others, year after year, because of the superior natural ability of their managers; and in so far as these profits result from limited natural ability, they are analogous to rent upon land. These profits, however, like all others, result from the wise choice of risks. That is, in fact, the way in which superior ability manifests itself. Moreover, every concern runs a risk every time it employs an executive, or decides to retain one, or allows any other concern to outbid it. This may seem to economists too broad a use of the term 'business risk'; but to business men it is commonplace.

From all this it must be clear that business men are constantly impelled, by the powerful urge of self-interest,

to choose risks as wisely as possible. To assume that public officers, selected through political means rather than through the struggle for survival in actual business, and with no personal liability for the losses due to their mismanagement, would choose as wisely among business risks as the responsible enterprisers in a profit economy, is to assume that human nature will suddenly become entirely different from what we know it to be.

Summary

Thus far, in Part II, we have stated a few essentials in a theory of profits — a few accepted principles that seem to be a necessary foundation for our discussion of practical business problems. Throughout that discussion we must bear in mind that business profits and losses result from taking risks; that risks are due to uncertainties that are inherent in the nature of business; that, as a rule, these uncertainties are not the artificial creation of gamblers, but necessary attributes of a living, social organism — a part of the price we pay for progress. As these business risks are not susceptible of reliable measurement, somebody must carry them. No business man can escape all of them; if he escaped all other risks, he would have left the risk of dying of dry rot.

Of these various risks, we shall be concerned mainly with those that arise from consumers' freedom of choice. To this crucial phase of the subject of profits, we shall now turn.

CHAPTER VI

RISKS ARE DUE MAINLY TO CONSUMERS' FREEDOM OF CHOICE

PROFITS and losses, then, are due mainly to uncertainties that are inherent in the nature of business. Chief among these uncertainties are those that are inherent in human nature. For, since the end of business enterprise is consumption,[1] production is regulated by distribution; and distribution in turn is regulated by the flow of money through consumers' markets. But this flow of money is directed and conditioned solely by the daily exercise of freedom of choice on the part of millions of consumers. What will these consumers want? How much will they buy at a given price? When will they buy? Where will they buy? Nobody can answer these questions in advance, partly because nobody can forecast the vagaries of human nature. This uncertainty concerning the ways in which buyers will make use of their freedom of choice is the chief risk of business. It is, therefore, chief among the causes of profit and loss.

Three Options go with Money

This uncertainty is due largely to three options enjoyed by the holder of money. He can decide *when* he will buy, *what* he will buy, and *where* he will buy.[2]

He has freedom of choice concerning the *time* of spending his money. He may withhold it from circulation as long as he pleases; at least he may withhold whatever he does not need to pay taxes and to keep him alive. Under a system of barter, on the other hand, purchasing power can be withheld only in the form of commodities — sugar,

wool, eggs, lumber, raspberries, and the like. The possibilities of profitably keeping this kind of purchasing power out of the market are rigidly limited. It is mainly on account of a medium of exchange, therefore, that buyers now have a wide range of choice with respect to the time of using stored-up purchasing power. This time-factor, which money has introduced into business, must be measured and reckoned with.

The owner of money also has freedom with regard to the *goods* he will buy. The owner of wheat may sell wherever there is a buyer of wheat, and the buyer may buy wherever there is a seller of wheat. In this respect, the buyer and the seller have ranges of choice which would be balanced in the long run, were it not for the further fact that the buyer, by virtue of holding money, has the additional choice of not buying wheat at all, but of buying a substitute; whereas the seller must sell wheat to somebody, sometime. The holder of diamonds, phonographs, furs, or other commodities which the buyer may classify as non-essentials, is at a further disadvantage, since the holder of money need not even seek a substitute. He may refrain from buying non-essentials of any kind.

This freedom of choice is being extended constantly by the widening ranges of available markets. To-day the planter in Porto Rico, without leaving his home, may sell his bananas and exchange the proceeds for tea grown in India, toys made in Germany, and a thousand other commodities that a mail-order house in Chicago will collect for him from distant producers who never heard of him or even of Porto Rico. He may spend his money locally, nationally, or internationally, by mail, telegraph, or cable, wherever a system of money exchange is in working order. This geographical range of choice, while reducing some of the risks of business, gives rise to others.

Because of these three choices, as to *time* and *goods* and *place*, which go with money, the buyer is almost always in a strategic position. Ordinarily, therefore, the seller is the chief risk-bearer, for he has but one choice; namely, to sell for whatever price the buyer decides to pay for his goods, or to keep the goods. And to keep the goods very long is usually to court bankruptcy. There are fluctuations in the advantage of the buyer over the seller, but the advantage persists; and it persists by virtue of the three choices that go with the buyer's money. The chief risks of business, therefore, arise from consumers' freedom of choice in a money economy.

It is of the utmost consequence in what directions holders of money exercise this freedom of choice; for a marked change in total expenditures, or in the relative amounts of purchasing power spent at home and abroad, or in the relative amounts spent for new capital goods and for new consumers' goods, may cause changes in prices, in wages, in profits, and in volume of production which lead to business depression.

The Freedom of the Buyer is Wide

Consumers have virtually unlimited freedom of choice. Though that is merely a truism, its crucial place in economics is seldom understood by the people generally, and never by the advocates of Government price-control. Let us, therefore, consider at some length what this free rein of the buyer's fancy means to business. Every day, in the United States, at least sixty million people, exercising this freedom, spend at least one hundred million dollars. Every day they buy the commodities and services of their choice, and no others. Do they choose to spend one seventh of their income on motor-cars and motor-car supplies? Very well, no one can stop them. Do they refuse to

buy certain magazines and certain styles of shoes? Again, they do exactly as they please. They flock to 'Abie's Irish Rose' after all the theatrical managers have decided that they will not. They buy *Main Street* eagerly until April; then — presto! — they stop buying *Main Street.* Women wear furs all summer or refuse to wear them at all, as suits their fancy. They suddenly decide to bob their hair and dispense with veils. The helpless makers of hairpins and veils would junk their machinery were it not for the hope, the not unreasonable hope, that before very long women will just as suddenly decide that they cannot possibly get along without hairpins and veils. All consumers, men as well as women, are free to-day to choose as illogically, as unwisely, as capriciously, as extravagantly, as they please. And to-morrow is a new day: what they will demand to-morrow, nobody knows.

But, it is said, the freedom of the consumer to choose is restricted on every hand by advertising, special inducements, fashion decrees, and all the other beguiling arts of salesmanship. This objection, a very common one, obscures the issue. It is true that in a thousand ways the choice of the consumer is *influenced;* but his freedom to choose among all the products that are offered to him is not thereby *restricted.* He is as free to cast his vote in the markets, regardless of the claims of rival products, as he is free to cast his vote at the polls, regardless of the pleas of rival candidates. No matter how many times he is urged to eat an apple a day to keep the doctor away, he is free to eat something else; no matter how many billboards point their arrows at him, he is not obliged to chew gum.

'Have you had your iron to-day?' cries the advertiser.

'No,' answers the consumer, if he happens to feel that way about it, 'and I don't want any.'

That settles the matter; and so the history of advertising is strewn with wrecks.

The producer does his best — of course he does — to change the tastes of the consumer. So does the church, the school, and the press; so does the gang, for that matter, and the union, and the club. In fact, society is an intricate combination of influences that together largely determine the tastes and the conduct of every one of its members. The producer is only one among innumerable factors.

All this, however, is beside the point. Essential as it is for a complete understanding of what goes on in the markets, it in no way invalidates our main contention that the consumer, not the producer, has the whip-hand. Whether the consumer refuses to comply with the wishes of the maker, or the maker refuses to comply with the wishes of the consumer, in either case, it is the maker who suffers; it is 'Heads you win, tails I lose.' In short, all the maker can do is to *beg* the consumer to buy what he makes; the consumer can *force* the maker to make what he buys, or go out of business.

This Freedom results inevitably in Profits and Losses

Consider what this means to business. It means that in growing potatoes, producing plays, building railroads, organizing banks, stocking shops, and the rest, men must advance money with no assurance that consumers will do their part in enabling them to get their money back.[3] When a man starts to make a straw hat in January, he does not know whether any one will pay enough for that hat before June to cover the costs; but somebody must run that risk in January if everybody is to be free in June to buy straw hats or not to buy, and to choose what kind of hats he will buy. Similarly, it is only because men have

risked their money all the way from the ranch to the meat market that there are chops to be had this morning. Every day Armour and Company pays for live stock more than a million dollars in spot cash, with no guarantee that receipts will cover the cost of the animals and the cost of converting them into meat and by-products. Sometimes consumers reimburse the packers; sometimes they do not. The tire manufacturer borrows money, builds a factory, installs machinery, hires laborers, buys rubber and fabrics, organizes a sales force, lets advertising contracts — all on the chance that, when the tires are ready for use, somebody will pay enough for them to take care of all these advance payments. But will that somebody come forward at just the right time and do what is expected of him? Nobody in the world is wise enough to say. The production of tires must go forward, if at all, on mere estimates of future demand. What these estimates are, what stocks are produced, what they cost, the buyer does not know or care.

The retail dealer, too, must take his chances. As a rule, he must put his own money or borrowed money into stocks — fur coats, for example. Then, along with other risks, he must run the risk of a general slump in prices, or a relatively weak market for fur coats, or both. But, if he has paid for the coats, it does not matter to the coat-makers how mistaken his judgment of the market turns out to be. The risk, except in so far as it has been transferred by insurance, is assumed by the dealer who advances money and holds the coats; and the risk is due to the fact that consumers are at all times at perfect liberty not to buy.

Now nobody will run these risks of loss unless there are chances of profit. This brings us to a fact that will figure largely in our subsequent discussions — another funda-

mental fact that is overlooked or blurred in our current indictments of the prevailing profit economy: since the individual's option to buy or not to buy is the chief cause of profit and loss, there is no possibility of eliminating profit and loss without depriving the individual consumer of freedom of choice.

Consumers' Freedom of Choice involves Wastes of Competition

The usual analysis of the wastes involved in the competitive pursuit of profits does not dig deep enough to uncover this fundamental fact. 'The chief wastes dealt with by socialists,' says Harry W. Laidler, 'are generally those connected with the distribution of commodities. Competition demands the expenditure of enormous sums in securing a market. . . . In the printing trades, a considerable portion of workers, ranking in the census as engaged in production, are busy at printing "not books, or newspapers, or magazines; but advertising matter, competitive price lists, wrappers, trade labels, bill-heads, account books, posters, etc., which are merely called into existence by the struggle of various competitive sellers to reach the consumer," and which could largely be eliminated under a coöperative system of industry. Much of this matter is misleading; some of it, issued for the purpose of deceiving. The reader must pay the price.'[4] Such indictments of the capitalist system are superficial. They go far enough to uncover competition for the consumer's dollar as a cause of wastes, but they do not go far enough to uncover the consumer's freedom of choice as the cause of competition.

As a matter of fact, this rivalry among profit-seekers in the race for the consumer's dollar is called forth because of the consumer's three options in the use of his dollar. There are many ways in which these so-called

'wastes' could be reduced; but there is only one way in which they could be eliminated; namely, by eliminating consumers' freedom of choice. Admittedly, the cost of distributing regulation army supplies is small. No efforts are wasted in persuading the individual soldier to choose this style of hat or that kind of breakfast food; for he has no choice. Collar manufacturers do not court the soldier trade until the army is demobilized. Provided we were all willing, under a system of communism, to accept whatever the State produced and allotted to us, or provided we were willing and able, under a price and profit system, to buy, at Government-fixed prices, whatever the State produced, we could do away with some of the present vast costs of distribution.

Communism abolishes Profits by abolishing Freedom of Choice

Communism does, indeed, abolish the 'wastes' of distribution under a competitive system along with individual profit, but only because it abolishes individual freedom of choice. The communistic State decides what is good for everybody and undertakes to supply each citizen with the 'standard' requirements. There is no risk due to changing wants, for the individual gets what is allotted to him, whether he wants it or not. In like manner the directors of the New York Foundling Society can decide in December on the clothes, lodgings, even the names that are to be assigned to all the abandoned children that will be found on doorsteps during the following year. The children are not consulted. If all members of society would turn themselves over to the care of a board of directors, and accept whatever was allotted to them, it would be possible to organize industry on some other than a profit and loss basis.

Under the competitive system, we are told, consumers

must pay for all the costly advertising. In such general terms, this is merely a truism. All human beings are consumers; there is nobody else to pay the costs of advertising or any other costs. But this charge against a profit economy, though in general valid, often involves the unwarranted assumption that the individual producer or distributor can incur whatever advertising costs he pleases, add these costs to the price of his product, and collect them from buyers who have no option in the matter. Thus the business man's inescapable risk is ignored, all because the crux of the situation — the fact that consumers hold most of the options — is not taken into account. The consumers themselves decide, in the process of exercising their options, what advertising they will pay for. When they refuse to pay, those who have advanced the money are not reimbursed. And consumers are constantly making the refusal. Every year they decide that thousands of advertising concerns shall not collect enough in sales to cover the money they have advanced in attempts to influence choice. The consumers are the court of last resort: there is no appeal from their decision.

We must not overlook the fact, moreover, that these efforts of competitors to sell their goods are properly called 'wastes' only if the privilege of choosing among competing products, and the improvement in the products themselves that results from this competition, are not worth paying for. How much they are worth is a question we shall consider presently. Here we seek only to emphasize the fact that the consumer's freedom of choice, which is the chief business risk, and therefore the chief cause of business profits and losses, is also the chief cause of the high costs of distribution.

Conclusion

This, then, is the gist of the matter: Somebody must determine what goods are to be produced. The decision must rest either with the Government or with consumers. As society is now organized, consumers decide. The only way they can make their decisions effective is through exercising their freedom of choice in the ordinary course of marketing. This freedom of choice constitutes the chief risk of business, and gives rise inevitably to profits and losses.

CHAPTER VII

REDUCING RISKS TENDS TO REDUCE PROFITS AND LOSSES

FROM now on we shall have much to say about desirable ways of reducing profits. We mean the exceptionally high profits of individual concerns. In general, whatever prevents such profits tends to prevent correspondingly large losses, and to benefit business as a whole. Risks which give rise to exceptionally high rates of profits for individual concerns should be curbed wherever practicable, not only because such rates are socially undesirable, but also because they interfere with business enterprise as a whole.

Since the profits and the losses of business enterprise are the outcome of risks that have been taken, it follows that whatever reduces risks tends to reduce both profits and losses. The Great Atlantic and Pacific Tea Company, for example, narrows the range of its risks by scientific cost accounting, by selling only for cash, by investing very little in each of its stores, by carrying nothing but staple commodities, and by freeing itself from dependence on the trade of any one locality. Thus the company makes less than four cents of profit on each dollar of sales; but, as the records show, it has little danger of loss. The ordinary grocer, on the other hand, through incurring far greater risks, has a better chance of making a larger percentage of profit on his sales; but, as the records show, he is in far greater danger of making no profit at all.

Conversely, whatever increases the risks of business enterprise tends to increase both profits and losses. At

the present time, for example, men customers are increasing the risks of shoe manufacturers and shoe dealers by purchasing new styles. In this automobile age, when men seem to care more about the appearance of their feet and to use them less, there is a decreasing demand for the staple lines of heavy shoes that used to be produced in large quantities, year in and year out, and an increasing demand for innovations. As a result, manufacturers take greater risks in producing the new styles, retail dealers take greater risks in stocking their shelves, consumers necessarily pay more for their shoes, and profits and losses are greater than they would otherwise be.

It is a matter of common observation that profits and losses are likely to be great where uncertainty is great — in million-dollar film productions, for example, in the construction of buildings where strikes are imminent, in the summer hotel business, and in the development of oil properties. Profits and losses on women's hats are much larger than on men's hats because of the greater difficulty in forecasting demand. Grocery stores show a small percentage of profit on sales of staple articles, such as sugar and salt, the demand for which is constant, and a large percentage of profit on sales of fancy goods and perishable products, such as caviar and strawberries. Since profits and losses are due to risks, and risks are due to uncertainties, it follows that the chief way to reduce profits and losses is to reduce uncertainties.

Knowledge and Publicity reduce Profits and Losses

This requires, first of all, increased knowledge. We should have more accurate and more nearly complete statistics concerning stocks of goods on hand, current and contemplated output, planting intentions, contracts awarded, building construction, sales, prices, wages, em-

ployment, consumers' purchasing power, savings, and other factors that cause fluctuations in consumer demand. Various other statistical data which summarize current economic conditions should be so improved and extended as to increase our knowledge of what is going on now and what is likely to occur in the future.

If the first necessity for reducing the uncertainties of business enterprise is increased knowledge, the second necessity is publicity for such knowledge as we have. Indeed, of all the available means of reducing profits and losses, the one that transcends all others in effectiveness is widespread distribution of dependable information. The more accurate information we have concerning realized profits and the prospect of profits, and the wider the distribution of this information, the smaller are the chances of large profits or large losses.

Yet, as a rule, business has been conducted in the dark. Business men have jealously guarded information about their undertakings, particularly about their profits. They have regarded secrecy as a legitimate, indeed, a necessary, business asset. But private enterprise is not justified in withholding information, the circulation of which would reduce the excesses of business cycles, the resultant loss to society, and the cost of supplying the needs of the community at all times. Compulsory publicity is justifiable because public welfare requires effective competition, and effective competition thrives in the light. Indeed, one of the chief motives of secrecy is to render effective competition impossible.

Publicity, moreover, limits the field of fraudulent enterprise, a field in which the risks, and consequently profits and losses, are very large. Instances are numerous and well known. The regulation of stock exchanges and the requirement of detailed, certified statements in connec-

tion with the listing of securities have done much to prevent profits and losses due to fraud. Compulsory publicity has had similar results in the banking business and in the insurance business. The laws which require manufacturers to list ingredients on the labels of certain products have cut off opportunities for profits and losses in some objectionable enterprises. And it is well known that, among the railroads, publicity has helped to do away with certain forms of risk-taking that once were common. Those who invested in stock of the New York, New Haven and Hartford Railroad Company, at prices ranging as high as $279 per share, have not received a dollar in dividends since 1913. Adequate publicity concerning the financial operations of the road would have helped to prevent these losses. 'Sunlight is said to be the best of disinfectants; electric light, the most efficient policeman.' [1]

The more the business world knows about dangers ahead, the less dangerous they are. A storm that is accurately predicted does not wreck many ships. When farmers know from reports concerning intentions to plant that there is danger of too large an acreage of corn, some of them change their plans. When manufacturers know that there is likely to be a shortage of silk, they husband their supplies, revise their production schedules, prepare to use substitutes, curtail commitments for future delivery, and in various other ways forestall the anticipated trouble. In short, if extraordinary happenings in the business world are clearly seen in the offing, they are not likely to occasion either extraordinary profits or extraordinary losses.

Such of the profits and losses in the purchase and sale of investment securities as are due to changes in the real value behind the securities cannot be reduced by means

of publicity; but the profits and losses that result from this kind of trading are due in part to deception. If all investors had complete knowledge concerning values, obviously bonds and stocks would seldom be sold for more or less than they were worth. Complete knowledge is humanly impossible; but increased knowledge is always possible. The more investors know about the factors that determine values, the smaller will be the chances of profit and loss.

Nowhere do we find more timely, persistent, and intelligent efforts to forecast business conditions than among professional speculators. Every event of any concern to the business world, they seek to discount in advance. Consequently, it is precisely where speculation is most highly organized that the means are perfected for pooling promptly the most extensive and dependable information. Thus, to the extent that speculation reduces uncertainties, it tends to reduce profits and losses.

Publicity reduces Profits and Losses by promoting Sound Management

One of the reasons why publicity tends to reduce profits and losses is that it is a constant incentive to sound management. It is in accord with all we know about human nature that men should be willing to take risks in secret which they would not be willing to take in the open. This applies to men of integrity as well as to others. When men are aware that their activities are to be promptly known and appraised by the public, they are likely to take greater care in the selection of risks. If the public knew as much as it ought to know concerning costs and profits, some kinds of risks would not be assumed at all. As Mr. Tawney says concerning revelations of bewildering profit and waste in British industry: 'If the full facts had been

published, as they should have been, quarter by quarter, these revelations would probably not have been made at all, because publicity itself would have been an antiseptic and there would have been nothing sensational to reveal.' [2] The fact that banks are now conducted, as a rule, on such sound business principles and lose so little from bad risks, is unquestionably due in part to the publicity required by law. Under constant scrutiny, banks are compelled to exercise constant care.[3]

Business Statistical Agencies reduce Risks

The various business statistical agencies that have been organized by private enterprise have reduced risks through reducing ignorance. By throwing light on what has gone on in the world of commerce and finance, what is going on, and what is projected, they have given business men a better basis for forming their own judgments. By furnishing dependable information concerning building permits, for example, they have helped such concerns as the American Radiator Company to plan production schedules. Though these agencies have been conducted on a commercial basis, and have intended their information for the sole benefit of subscribers, they have nevertheless, on the whole, promoted the public welfare by helping to limit the range of business profits and losses.

Their subscribers, it is true, have used these services in the hope of increasing their profits; and some of them have succeeded. The net effect of all these services, however, has been to reduce those business profits and losses which are due to ignorance; and this social benefit will increase as these services increase in number, in wisdom, and in patronage. The more successful they are, the less value they will be to certain of their individual subscribers and the greater value to society. From the standpoint of

society, large profits are less to be feared than large losses; but both are undesirable. As a matter of fact, the chief service of forecasting agencies is not in enabling certain individuals to make larger profits than others, but in distributing information that reduces the risks of all, and thus makes both large profits and large losses fewer than otherwise they would be.

Fortunately, these sources of information are increasing in number, in reliability, and in use. Among them are Government departments, university bureaus, chambers of commerce, scientific societies, journals of commerce, trade associations, statistical departments of banks and corporations, as well as professional statistical agencies.

It is natural that these services should have been undertaken first by private initiative. That is the familiar story of progress in medicine, in education, in insurance, and in human affairs generally. Private enterprise experiments; leads the way; proves its case. In the public interest, however, statistical services should be free of charge; for the wider the distribution of such services, the greater their value. The individual, as a rule, seeks confidential information that will give him an advantage over those who have it not; but the State seeks equal advantages for all. So it seems unfortunate that universities should feel obliged to charge large fees and thus limit the social value of the admirable economic services which they have recently developed.

These Services are Proper Functions of the Government

It is, then, sound public policy to reduce business risks; and the chief means of reducing risks is through spreading accurate information as widely as possible. This is a function for which the Government is well qualified. Public education is primarily a function of the State;

and the greater the success of the State in collecting and distributing information concerning all the factors which determine business profits and losses, the smaller they will be.

As no Government is qualified to take over the functions of price, no Government should attempt to regulate individual prices.[4] But regulation of profits necessitates regulation of prices. Clearly, then, direct regulation of profits by the Government — except in cases of monopoly where prices are also regulated — is beyond the bounds of possibility. But as profits and losses spring largely from ignorance, it would be possible to eliminate them if the Government could make all its citizens omniscient. This the Government cannot do; but there is much that it can and should do. For the protection of all who travel on the seas, the Government now maintains geodetic services, weather forecasting stations, and lighthouses; no one sells confidential information concerning rocks and shoals and the approach of storms. It is just as clearly in the public interest for the Government to maintain business lighthouses, and to chart the rocks and shoals of commercial seas.

In this way the State should seek to relieve business men from uncertainties, thus enabling them to devote themselves more effectively to the creation of wealth. In the past, unfortunately, the success or failure of men engaged in manufacturing, in transportation, and in agriculture, has depended more upon their skill as prophets than upon their industry as producers.[5] In view of the fortunes and the failures that have been due to the cornering of information that should have been made public, it is not surprising that many men have sought the complete overthrow of the present economic order. Of all the available measures for counteracting the propaganda of

revolutionary radicals, none can accomplish more than the right kind of Government reporting of business conditions.[6]

Various Government Reports now tend to reduce Profits and Losses

Some such reporting we already have. The services of the Bureau of Agricultural Economics, for example, although naturally they have aroused opposition, and though necessarily they have been less valuable in the experimental period than they are certain to become if the Bureau remains free from partisan, political interference, and free from the obstructions of short-sighted profit-seekers, have done much to decrease the risks and therefore the wide fluctuations in the profits and losses of farmers and dealers in farm products. Chief among the means employed by the Bureau for this purpose are crop estimates, standardization of products, shipping-point inspection, market inspection, and market news service. The crop estimates, which are issued by the Bureau at stated intervals, give information regarding present and prospective supplies, and thus enable farmers to reduce the extraordinary profits and losses that go with underproduction and overproduction of the great staple and perishable crops. Standardization of raw products and of the containers in which perishable products are shipped reduces the risk of sending to market what the market does not want. Standardization also facilitates safe buying at a distance, safe use of quotations, safe use of market news, and thus, especially on perishable products, reduces risks all along the line. Shipping-point inspection prevents shipment of much produce that would not reach market in good condition, drives home the necessity for standardization, and lessens such shipping risks as wastes

and decay in transit and the arrival at market of produce that cannot be sold at a profit. Market inspection reduces the risk of sharp practice at both ends of the line, by reducing the risk of shipment of undesirable produce and the risk of unfair rejections by dealers. Market news service, by telegraph, radio, and mail, informs both shipping areas and receiving markets regarding immediate and prospective supplies, the condition of supplies at shipping points and in large markets, probable demand and probable prices. All this helps to prevent the large profits and large losses which are due to the simultaneous glutting of some markets and under-supplying of others. This market news service, by thus bringing supply and demand together and curbing price fluctuations of individual products, does more than any other single agency could do to reduce the risks that inevitably attend the marketing of perishable agricultural products. Thus the spread of information by a Federal agency reduces the spread of profits and losses.[7]

The Department of Commerce has promoted the general welfare in similar ways. Secretary Hoover holds that the collection and distribution by trade associations of 'current, unidentified information and statistics as to production, stocks on hand, and prices on closed transactions should be permissible, providing that it is all made available on fair terms, not only to the association members, but to all others interested, including the general public.'[8] Accordingly, the Department of Commerce has developed methods of coöperation with trade associations 'under which the association's secretary collects and compiles unidentified, current information and distributes it to the members, simultaneously sending identical reports to governmental agencies, competitors of the association's members, and to any other person who arranges for

them.' [9] The Federal Reserve Board also helps by issuing valuable reports concerning monetary aspects of business. In so far as all these Federal services tend to make competition freer and to prevent mistakes due to ignorance, they tend to reduce profits and losses.

CHAPTER VIII

REDUCING FLUCTUATIONS IN THE PRICE-LEVEL TENDS TO REDUCE PROFITS AND LOSSES

ONE of the chief uncertainties of business — at times the uncertainty that transcends all others in dire results — is the shifting value of money. This is a cause of stupendous profits and losses.

The monetary chaos into which Europe was plunged by the World War gave tragic proof that at times the stabilization of money values is the one means of preventing extreme business profits and losses, without which all other means are of no avail. In the years of war inflation, every one who had any money to spend found out that the chief monetary need of the world is not 'abundant money,' not 'easy money,' not 'a more elastic supply of money,' but money that is a true standard of value — money that is safeguarded from excessive fluctuations in purchasing power. Without such a safeguard, money is a delusion and a snare. A rapidly shifting price-level is sure to be attended by alternate periods of business elation and gloom, with the familiar trend of extravagance, injustice, excessive speculation, overproduction, tight money, business failures, unemployment, and hard times. Both inflation and deflation are disastrous economically, morally, socially. Neither is a cure for the ills of the other. Indeed, in an industrial order founded on the production and sale of commodities and services at a money profit, there is no economic phenomenon so far-reaching in its consequences as unstable money. All this we considered at length in a previous study.[1] We are here con-

cerned mainly with the relation of fluctuations in the purchasing power of money to profits and losses.

Large Profits and Losses result from Unstable Money

As the purchasing power of money declines — that is to say, as the price-level rises — profits are realized from the increased dollar value of commodities, quite apart from profits due to any other causes. As the purchasing power of money rises — that is to say, as the price-level falls — losses are suffered on account of lower prices, in addition to all other losses. These risks are the chief disadvantage of a medium of exchange. In a barter economy there are no profits and losses due to shifting price-levels, for there is no concept of price, no such thing as a price-level. Even in a barter economy, it is true, there are profits and losses due to changes in the *relative* value of commodities. If a planter barters tobacco for furs, and furs then become relatively scarce, he may profit by the change; and *vice versa*. But in a money economy, all such risks remain, and a new one is added; for the intermediary itself may become scarce as compared with commodities in general, or commodities in general may become scarce as compared with the intermediary. A planter who sells his tobacco for money and saves the money may find its command over commodities in general increasing or decreasing. Thus profits and losses arise from the fact that the monetary unit, unlike the yardstick, is not a good measure. Over its fluctuations the individual business man has no control. Consequently, as we have said, he sows where he does not reap, and reaps where he does not sow.

How far from dependable the dollar of the United States has been as a unit of value since 1896 is shown in Figure 2. Using 1913 as the base year, and considering

the dollar of that year as worth 100 cents, we find that it was worth 40 cents less than the dollar of 1896, and 53 cents more than the dollar of 1920. Consequently, a man who saved money in 1913 found that in 1920, through no fault of his own, his savings had lost more than half their goods value. Thus inflation made a mockery of his thrift. But those who saved other forms of wealth during that period found that, through no merit of their own,

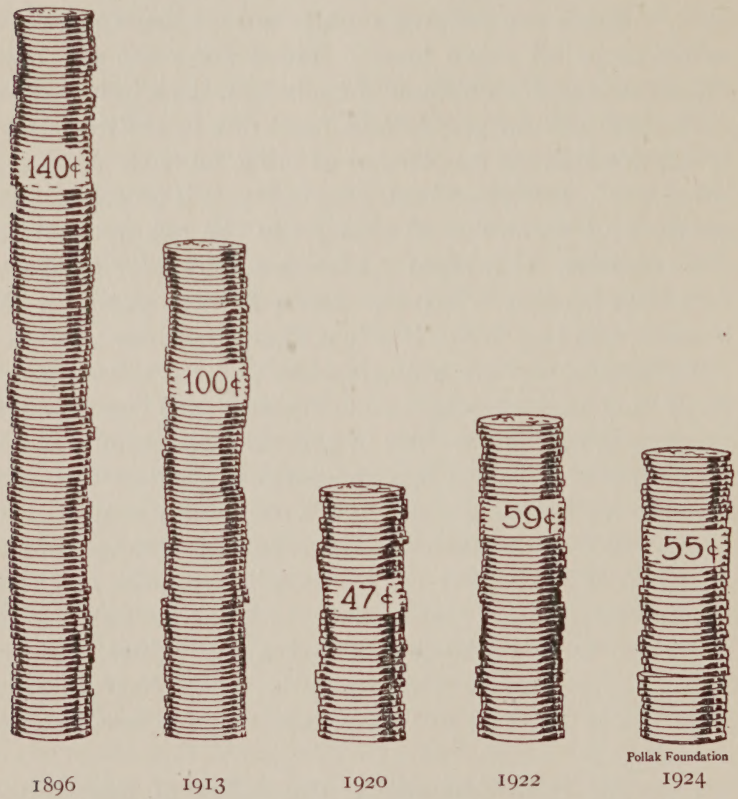


FIGURE 2. FLUCTUATIONS IN THE PURCHASING POWER OF THE DOLLAR
(Computed from the Index of the General Price-Level, of the Federal Reserve Bank of New York. Prices in 1913 = 100.)

their savings on the average had more than doubled in money value. From 1896 to 1920, business as a whole gained profits from the appreciating dollar-value of commodities, and then suffered losses from the depreciating dollar-value of commodities.

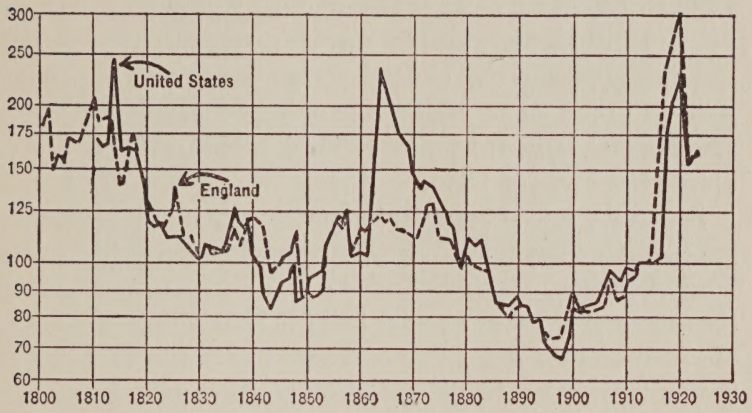


FIGURE 3. COMMODITY PRICES IN THE UNITED STATES AND IN ENGLAND 1800–1924

For England, 1797–1820 and 1914 to date, and for the United States, 1814–17 and 1862–78, prices are in inconvertible paper money. With these exceptions, the chart shows the movement of gold prices, which were substantially the same in all other countries

(Early data from the *Monthly Review* of the Federal Reserve Bank of New York, June, 1921. Prices in 1914 = 100)

Figure 3, which charts the movements of the price-level in the United States and in England since 1800, depicts in a general way the extent to which profits and losses have been caused by unstable money. In the twenty years prior to 1810, the price-level in England, according to Jevons' index, rose from 85 to 161. That is to say, prices in general nearly doubled. During this period, therefore, in addition to the profits that resulted from all the other risks that were taken, there were large profits because of the shifting value of money. From 1809 to 1849, the index of prices in England fell from 161 to 64.

During this period, therefore, unstable money made large losses for holders of commodities, in addition to the losses that resulted from all other risks. Between 1849 and 1873, according to Sauerbeck's index, the price-level in England rose, with some setbacks, from 74 to 111. From 1873 to 1896, prices in gold-standard countries fell, while prices in silver-standard countries rose. In 1873 the purchasing power of the United States dollar was about one half as great as in 1896. Then began another upward movement. By 1914 prices were about fifty per cent above the level of 1896.

But this inflationary movement was moderate compared with what followed. The War doubled prices in the United States, trebled them in Western Europe, and in Russia carried them to such heights that all other sources of profit seemed negligible compared with the vast profits that were due to the depreciation of the ruble. Even this record of inflation was exceeded, after the Armistice, by the printing-presses of Germany, until the profits and losses due to the movements of the mark were so stupendous as to render the ordinary course of business in a price and profit economy utterly impracticable. Thus it is clear that money, whether on a gold basis or not, has never been a good measure of value. Consequently, it has always been a cause of business profits and losses.

Business Failures rise and fall with the Value of Money

It is evident from Figures 4 and 5 that the number of business failures rises and falls with the value of money. The outstanding feature of Figure 4, which gives failures by quarters from 1913 to 1924, is the steady decline in the number, as the price-level goes up, and the sharp rise in the number, as the price-level goes down. The same

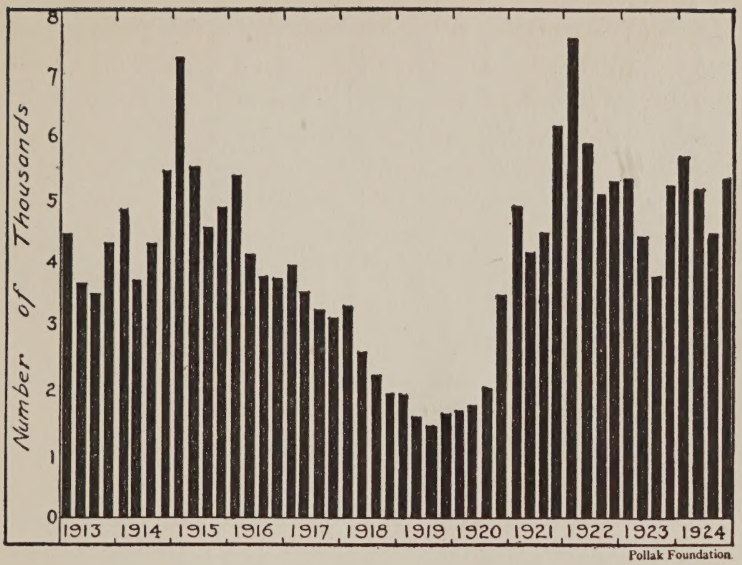


FIGURE 4. BUSINESS FAILURES IN THE UNITED STATES BY QUARTERS 1913–24
(Statistics from *Dun's Review*)

relation between business failures and money values appears in Figure 5. This shows the percentage, of the total number of firms in business, which fail each year. Without any other index of prices than these charts, one could tell at a glance that the upward movement of prices did not get well under way until 1916; that it continued at a rapid rate for more than four years; that the peak of prices came toward the middle of 1920; and that the slump in prices was arrested about the middle of 1922. Thus, any chart for profits, business failures, or industrial activity in general reflects major fluctuations in the purchasing power of money.

Figure 6 records the number of business failures, 1914–24, by classes of establishments. The one feature of this

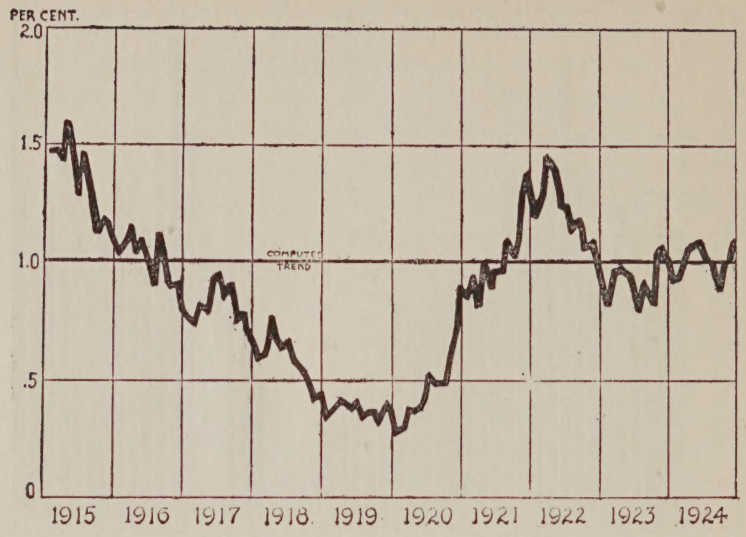


FIGURE 5. BUSINESS FAILURES IN THE UNITED STATES: SHOWING PER CENT ANNUALLY FAILING OF THE TOTAL NUMBER IN BUSINESS
(From the Federal Reserve Bank of New York)

chart that catches the eye immediately is the uniformity with which failures in all branches fell off from 1918 until the crest of the upward movement of the price-level in 1920; and the uniformity with which failures in all branches increased from that time until about the middle of 1922, when the downward movement of prices was stopped. A glance at the two lines at the top of Figure 6 shows that marked swings of the price-level affect trading and manufacturing establishments in much the same way. A glance at the other lines shows that the fortunes of various kinds of traders and of various kinds of manufacturers rose and fell together. Throughout the period of rapidly rising prices that culminated toward the middle of 1920, all the lines move downward; thereafter, all the lines move upward. Furthermore, the general trends of most of the lines, both before and after the peak of pro-

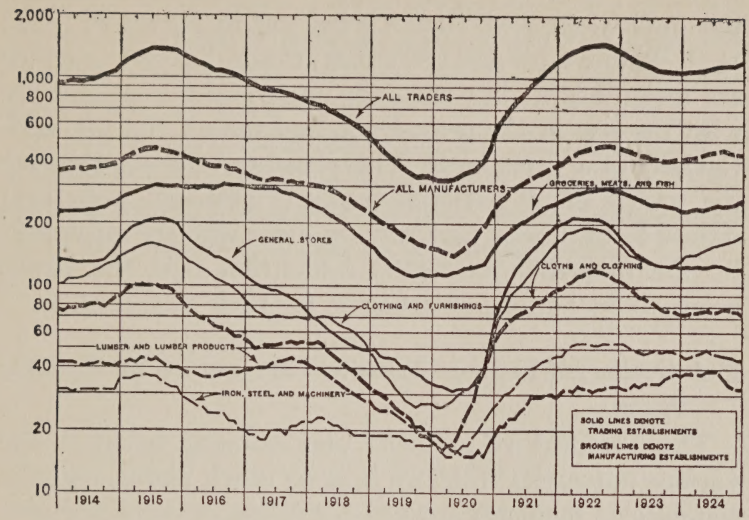


FIGURE 6. NUMBER OF BUSINESS FAILURES BY CLASSES OF ESTABLISHMENTS, 1914–24

(From the *Survey of Current Business*, of the United States Department of Commerce, June, 1924, p. 25. The figures plotted are 12-month moving monthly averages. Logarithmic scale)

sperity, are much alike. One might not expect to find a close correspondence between the course of business failures in the lumber industry and dealers in groceries, meats, and fish. Yet, throughout this major cyclical movement of business, the lines on the chart for these classes have the same characteristics. In spite of innumerable other factors that affect various enterprises differently, the preponderating influence of extreme fluctuations in the price-level is enough to carry all the lines for business failures downward, with one accord, as prices shoot up, and upward, with one accord, as prices shoot down. Thus, records of business failures show the sensitiveness of the entire business world to extreme changes in the value of money.

The effect of inflation and deflation on the earnings of

the Federal Reserve Banks is evident in Figure 26 (page 144). Before 1918 and after 1921, the additions to surplus are insignificant; but earnings and surplus rose sharply with the rise in the price-level, and fell off sharply with the fall in the price-level. This chart and the one showing the profits of all national banks (Figure 17, page 125) should be examined carefully by those who are impressed by the frequently repeated contention that the banks bring about periods of deflation for their own profit.

Maladjustments between Industries are caused by Unstable Prices

The 'natural adjustment and balance between the various industries' that we hear so much about, and the consequent tendency toward a leveling of costs and profits, are disturbed by sharp fluctuations in the price-level. Never during a period of relatively stable prices, such as the period from 1910 to 1914, have there been such maladjustments as occurred between 1914 and 1920, when the price-level of commodities rose more than 150 per cent, and between 1920 and 1922, when the price-level fell more than 44 per cent. Such maladjustments as the post-War changes in the relative purchasing power of farmers and of plasterers have not resulted chiefly from changes in the character of consumer demand. There is no evidence that our desire for food is much less, and our desire for shelter much greater, than a few years ago. So with teachers and Government clerks. The lag of their wage advances behind those of brakemen and mechanics was not caused by changing consumer needs or tastes. It was caused by changing money values. Even the coming of the automobile, which has occasioned the largest change in the character of consumer demand in the history of the United States, did not cause any sudden 'unbalanc-

ing of the industries.' This is evident from the fact that the maladjustments between the various industries followed the movements of the *price-level* rather than the production of automobiles.

Every influence, Federal or private, that helps to prevent extreme fluctuations in the price-level, every influence that militates against inflation and deflation, tends to reduce excessive profits and excessive losses.

CHAPTER IX

COMPETITION REDUCES PROFITS AND LOSSES

COMPETITION reduces profits and losses. The reason is plain. When profits in any field are high, new concerns are attracted to that field, and profits tend to fall. When, on the other hand, profits are low or lacking, some concerns are likely to drop out, and losses tend to fall. If, for example, the profits of grocers in any community are high, new grocers are likely to enter the field faster than the demand increases. Then profits tend to fall. But if the losses of grocers in that community increase, some of the competitors are likely to drop out. Then losses tend to fall. If a Huyler's candy shop does well in Times Square, a Loft candy shop appears in search of some of the profits. Such rivalry in any field usually stops at the point where the prospect of profit is not bright enough to attract new concerns. Thus, competition reduces profits and losses.[1]

Competition does not always seem subject to this law. There are times, first in one field and then in another, when increases in the number of concerns and in their efforts to take business away from each other increase the losses of all. Such a condition, however, cannot last. Even if rival enterprisers — taxicab companies, for example — would like to continue indefinitely in pursuit of policies that entail losses for all, they could not possibly do so. Moreover, this kind of rivalry springs partly from ignorance which is dispelled by the experience itself. The more men know about the causes of such losses, the

nearer they come to free competition; and the nearer they come to free competition, the smaller both the losses and the profits become.

Actual Competition is never perfectly Free

But what is free competition? Evidently it is not what goes on in the markets. Competition encounters innumerable restrictions upon its freedom, some of which it contrives to overcome at times, some of which it never can overcome. And as long as any of these obstacles remain, the actual competition of commerce must have different results from those which would follow from perfect competition.

One of the chief obstacles is the inequitable distribution of knowledge. There cannot be perfect freedom of competition between two men in any field unless they are equally informed concerning the factors that determine profits and losses in that field; and no two competitors can by any chance be equally informed. One is certain to know more than the other about processes, or sources of supply, or stocks on hand, or consumers' purchasing power, or pending legislation, or other controlling factors. One is sure to have an advantage over the other in forecasting fluctuations in prices, in money rates, in crops, or in demand. Whatever helps to make information concerning these factors the common property of business men helps to reduce the ranges of profit and loss, because whatever tends toward equality of knowledge among rivals tends toward freedom of competition. Since men are constantly learning part of what they need to know in order to make competition free, the real world is constantly *tending* to become a world of free competition; but this tendency must ever remain only a tendency, because men never can learn all that they need to know.

There are numerous other restrictions upon free enterprise. Even when men are well informed concerning opportunities, they are not entirely free to change from one business to another, or from one place to another. They encounter such obstacles as language, climate, laws, and lack of funds. They are restrained by family ties, habits, prejudices, and social taboos. Their investments in capital and in education cannot be transferred readily to other enterprises or to other places. No matter how far the price of wheat falls or the price of rubber rises, men cannot help matters by exchanging their ranches in Kansas for plantations in the Congo. Cotton manufacturers cannot quickly become meat packers; teachers cannot quickly become railroad engineers. Since men are thus prevented from promptly leaving less profitable enterprises or localities for more profitable ones, actual competition never eliminates profits and losses.

Because of these obstacles to free competition, society is and must remain an intricate network of combinations in restraint of trade. It is literally true that nobody can engage in any kind of business enterprise without thereby, in some degree, restricting the freedom of others. Indeed, nobody can move from place to place, or withhold information, or partially circulate it, or learn new methods, or quote prices, or market crops, or build a railroad, without making competition easier for some people and more difficult for others. In short, perfect competition is and must remain merely a theoretical abstraction, an academic study; it is never found in the market-place.

In spite of these manifold obstructions to freedom, keen competition is the rule; not one profit-making enterprise out of a hundred is a monopoly. And whenever success in securing a monopoly seems assured, the law is

at hand to remove some of the restrictions upon free competition, or, in cases where competition is against public welfare, to regulate profits. A large part of the efforts of the Federal Trade Commission have been directed toward those exceptional cases which failed to show the usual effects of rivalry. The aim has been to restore competitive conditions, even at a loss in efficiency, largely because competition tends to prevent excessive profits while enlarging consumers' freedom of choice. That competition — always keen though never free — prevails in actual business must be clear to any one who reads advertisements or walks along a business street with his eyes open. Yet our profit economy is often condemned as a successful conspiracy among business men to kill competition. 'Successful profit-making,' it is said, 'generally involves the destruction of competition and usually manages to nullify all efforts to resuscitate it.' [2] This is as far from the truth as it would be to declare that competition is perfectly free.

All this explains in part why so much confusion attends the discussion of 'free competition.' In everyday speech, this is only a relative term. Every one who uses it has more or less vaguely in mind some status part-way between absolute monopoly, which is exceedingly rare, and absolutely free competition, which is impossible; and no two persons have in mind exactly the same meaning. Seldom do those who speak about free competition have any idea of the multiplicity of restrictions upon freedom which individual business men have no power either to create or remove. No wonder, then, that people are often disturbed to find that competition does not have more effect in reducing prices and profits. No wonder that there are so many condemnations of capitalistic society and so many radical proposals for reform based on the

idea that whatever interferes with free competition must be due mainly to fraud.

Many people seem to think that, if Congress could prevent those 'combinations in restraint of trade' with which anti-trust legislation ordinarily deals, competition would be entirely free. Obviously, it never can be free. Even from these few, utterly inadequate comments on the subject, it must be clear that the proposal, frequently advanced in one form or another, to eliminate all profits by eliminating all restrictions upon free competition involves the annihilation, not only of time and space, but of ignorance, of deceit, indeed, of human nature itself.

SUMMARY OF PART II

We now have before us a few essentials in a theory of profits. All profits and losses, we have pointed out, result from taking risks. Risks are universal because uncertainties are universal. Business risks, unlike gambling risks, are inherent in the nature of economic enterprise in a progressive, as opposed to a static, society; and they must be borne by somebody. Chief among these risks are those that are inherent in human nature, those that must remain as long as consumers have freedom of choice.

Business men may choose among risks, but choose they must or go out of business. The only reason they do choose, and suffer the vast losses that follow in the train of risks unwisely chosen, is because there are prospects of profit. Every year many men fail to realize these prospects because the risks they run are too great, and many others fail because the risks they run are too small. But nearly every year a larger number of men succeed because they choose risks wisely.

Since profits and losses are due wholly to risks that are taken, it follows that whatever we do to increase risks

tends to increase profits and losses; and, conversely, whatever we do to decrease risks tends to decrease profits and losses. As there is no possibility of eliminating all the uncertainties which confront business, there is no possibility of eliminating all the risks. We can do much, however, to reduce them; first of all, by reducing fluctuations in the value of money, which at times have more to do with business successes and failures than any other cause.

We can further reduce risks by increasing our knowledge of various other causes of profit and loss, and by enabling and persuading business men to make effective use of such knowledge as we have. This is one of the very few functions in connection with business which governments are qualified to undertake. By thus increasing knowledge, we intensify competition; for the more men know about the factors that determine profits and losses, the freer competition becomes. And the freer competition becomes, the smaller the profits and losses of business tend to become.

Evidently, then, there is much that we can do, without tearing up the foundations of society, toward reducing the extremely large profits that many people deplore, and toward reducing the extremely large losses which, from the standpoint of society, are even more deplorable. This alone creates a presumption against revolutionary methods of reform. In the remaining parts of our study, therefore, we shall continue to consider whether those of us who decry large profits should not seek relief through the constructive and practical plan of gradually modifying the conditions which give rise to large profits, rather than through the destruction of our established profit economy.

PART III

THE AMOUNT AND DISTRIBUTION OF PROFITS

CHAPTER X

A STATISTICAL BASIS IS ESSENTIAL

We come now to that phase of the subject which transcends all others in importance, the question to which all that we have said hitherto has been but an introduction; namely, the relation of profits to the common welfare. This is a large question — complicated, many-sided, far-reaching. To some reformers the question seems an easy one to answer; but it is far from easy. It cannot be disposed of summarily; and it can never be answered by the counting of votes. It has to do with facts rather than with opinions; it calls for measurement rather than for argument. Ordinarily, we do not have heated controversies concerning the area of a farm; we survey it. We do not argue about the weight of a load of hay; we weigh it. Economic questions, as well, we should strive to answer in the only way that such questions can be answered finally, by means of accurate accounting and statistical analysis. Business men, it is true, cannot wait for final answers. They *must* act; otherwise most of us would starve. And every day they must take the risk of acting on imperfect knowledge, sometimes on mere guesses and hunches. Their constant aim, however, should be to decrease risks by increasing the range and reliability of economic measurements.

The relation of profits to the welfare of mankind, though a many-sided problem, is on all sides quantitative. The moment we examine any aspect dispassionately, we come to the question, how much? Even the effect of the profit motive on general welfare, though it seems to defy measurement, is none the less a quantitative problem.

More obviously are questions of material income quantitative. If we want to know about the material fortunes of wage-earners under a profit economy, we must measure the changes in real wages with the best scales we can devise; for no man's opinion on this subject is of much interest to anybody but himself. So with all the other problems that center about profits. What proportion of profits is distributed as dividends? What proportion of national savings is made by business concerns out of profits? To what extent does the withholding of profits as surplus or as working capital cause a deficiency of consumers' purchasing power? To what extent does the expansion of capital facilities out of profits result in overproduction? What is the relation of fluctuations in the rate of profit to fluctuations in employment? All these questions clearly call for statistical answers. First of all, then, we need a basis of fact.

The Available Statistics are Inadequate

Unfortunately, in spite of the notable progress of the last decade in the scientific study of social phenomena, especially in the perfecting of index numbers, the available statistics concerning profits still fall far short of meeting our needs. Indeed, in the whole domain of economics, there are few topics that lend themselves so readily to statistical analysis, concerning which we know so little. Our ignorance may be ascribed partly to the fact that enterprisers, struggling for survival in the midst of keen competition, have considered it good business policy to have very little to say about their profits; partly to confusion in the use of terms; partly to accounting methods which have given business men themselves no reliable measure of their profits.

What are the profits of a given concern for the year just

closed? They depend in part on what is regarded as capital, what is charged to operating expenses, in what way the expenses are pro-rated over a series of years, what value is placed on inventories, and how much is charged to depreciation. Such questions offer large scope for the exercise of judgment. Whether the annual report shows a substantial profit or a large deficit often depends on how these questions are answered.

Furthermore, as a base upon which to compute the rate of profit of a company, total investment, including surplus, should be used; but what is surplus? Sometimes it is nothing more than a bookkeeping transaction. Sometimes it stands for fictitious sums which have never been used in the business; sometimes for money that has been lost; sometimes for overvalued machinery or inventories. Whether the amount set down as surplus in the report of a particular company represents money that has been earned and put back into the business, or inflated capital values, or good-will, or something else, it is often impossible to tell.

To illustrate the difficulty of finding the rate of profit from official statements, we may compare the balance sheet of the Willys-Overland Company at the end of 1923 with the balance sheet at the end of 1922:

	1923	1922
Common Stock	$10,798,805	$53,993,850
Profit and Loss Surplus	13,002,418	def. 43,231,300

The change from a deficit of over 43 million dollars to a surplus of over 13 million was achieved in part by means of bookkeeping entries which involved writing down the value of the common stock from $25 to $5. This is an unusual example. For an ordinary example let us take an automobile company which has spent $200,000 on dies and presses for new models. The money is gone. How

should it be charged? That depends in part on how many years the new dies and presses are to be used, and that is a question which nobody can answer in advance. Something, however, must be done with that item of $200,000, and book profits for the year will depend in part on what is done with it. Or, take the case of a Southern lumber company which has invested 20 million dollars during the past four years in acquiring timber land and in preparing for operations in the Northwest. Is the interest on this investment to be charged to the operating expenses of the Southern mills and thus deducted from the profits of those mills? Or is the interest to be treated as an operating expense of the Western mills and pro-rated over twenty years? Again, are the operating losses of the new mills in the first year to be treated as expenses or as capital investment? Evidently book profits depend partly on facts and partly on the interpretation of facts.

We shall do well, therefore, to use all our statistics in this field with care. We must bear in mind that they do not always cover exactly what they seem to cover or measure the data with the precision they suggest. We must make due allowance for the fact that such terms as 'capital,' 'net income,' 'book profit,' 'surplus,' and 'depreciation' have different meanings in different corporation reports, with the result that statistics often lump together items that are not strictly comparable. We must take account of bookkeeping methods that sometimes credit profits to periods in which they are not earned, and sometimes show large paper profits, based on estimates of inventory values, which never become money profits. And we must not overlook the fact that at times some business concerns have strong motives for making their profits appear larger than they are, and others for making them appear smaller than they are. Finally, we

must be wary about drawing generalizations from reports which cover selected concerns, unless we can be reasonably sure that the basis of selection does not invalidate the data for the purpose at hand.

For certain purposes some of the statistics we are about to present do not show clearly enough what they cover; some are not sufficiently accurate; some are not sufficiently comprehensive. For our purposes, however, we believe that these statistics are adequate. In drawing conclusions from them, we shall endeavor to keep their shortcomings in mind.

These Statistics do reveal Important Facts

The available statistics, though far from satisfactory, are much more extensive and reliable than they were before the income and excess profits taxes brought about greater uniformity and accuracy in accounting methods and greater publicity. These are valuable by-products of the new laws. Data for the years before the World War, unfortunately, are relatively scarce; but for recent years there is a wealth of material in corporation balance sheets and Government reports that are now a matter of public record. These by-products of the income taxes have not yet been fully utilized, perhaps because long tables of statistics in official reports are forbidding.

If we take pains to analyze these statistics, they will tell us, accurately enough for our purposes, much that we need to know about the extent of profits and losses as a whole; variations in the rate of profits; the changing ratio of profits and other sources of income; the proportion of individual incomes derived from dividends; the variations, from place to place and from time to time, in the profits of certain industries; the variations in the profits of different concerns in the same industry, and of the same

concern in different periods; the contrast between the fortunes of some industries and the misfortunes of others; the relative success of small concerns and large concerns; fluctuations from time to time in the number of business failures, and in the amounts which successful enterprises set aside as corporate surplus.

All these matters concern us vitally. Before we proceed we must enumerate such important facts concerning them as are revealed by the available statistics. The statistics will soon be out of date, but not the facts. Most of these facts we shall present in the form of pictures; most of the statistical tables we shall relegate to the Appendix. Even so, we are well aware that some readers would rather accept our conclusions in brief form than struggle through four chapters of the most captivating statistics. We suggest that such readers turn to page 161, where for their benefit we append a summary of Part III.

CHAPTER XI

PROFITS ARE SOMETIMES LOSSES

First of all, we should note again the crucial fact that in any given year many business ventures do not realize any profits at all. This fact has a bearing on every problem with which we shall be concerned in the following chapters. In considering what kind of public control should be exercised over business as a whole, or over a particular industry, to what extent governments should regulate prices and profits, how long an income period should be taken for computing taxes, and what proportion of private income should be appropriated for public use, we must not overlook the possibility that in any given year the profits of a given concern may be a minus quantity. That possibility seems obvious; every day has its record of passed dividends and business failures.

Yet the system which occasions these losses is called a 'profit economy,' never a 'profit and loss economy'; and when that system is indicted, the minus side of the account is usually ignored. Much of our proposed industrial legislation and some of our existing laws also ignore the possibility of business losses, or are framed on the tacit assumption that in any given year a corporation need have no anxiety either over losses suffered in the past or losses that may be suffered in the future. Thus mistakes have been made in matters of paramount economic importance — the levying of profits taxes, for example, the fixing of legal minimum wages, and the regulation of railroad rates. Public policy cannot be sound until it takes fully into account the nature, extent, and consequences of business losses.

If we start with the assumption that winds blow only in one direction, we can develop an extraordinary theory of aeronautics; but it may not help us to fly. Upon the assumption that business is always conducted at a profit, or can be so conducted, we can construct in imagination an extraordinary industrial society; but it will not work. We cannot understand what will work — what is going on in business, or why, or what we can sensibly do about it — unless we grasp the full significance of these facts: that as long as consumers have freedom of choice, losses are inevitable; that no concern can possibly tell in advance how much money it will make or lose; that in any given year the profits of some concerns are offset by the losses of others; that paper profits do not always turn out to be real profits; and that the large losses of a given concern in certain years must be more than made up by large profits in other years, or eventually the concern must go to the wall.

Business Losses are Large

Business losses are far larger than they are commonly supposed to be; and the aggregate annual deficit of business enterprises in the United States is a stupendous sum. Even during the prosperous War year of 1917, there were at least 119,000 corporations that realized no profit; and their aggregate deficit was above 629 million dollars. Of the 356,397 corporations for which returns were received covering the year 1921, more than half reported no net income. The proportion of concerns that closed the year with a deficit was largest in the mining and quarrying group, and smallest in the finance, banking, and insurance group. In the former group three fourths, and in the latter group a little more than one third, reported no net income. In the rubber industries, about seven out

of every ten reporting corporations showed losses. In all, there were 185,158 corporations that reported no net income and their combined deficit was nearly four billion dollars.[1]

The proportion of successful concerns varies considerably from year to year. In 1919, about two thirds of the corporations in the United States reported net incomes; but in 1920, only 59 per cent, and in 1921, only 48 per cent. In 1920, nearly 73 per cent of the corporations in the lumber and wood products group reported net income, but in 1921, less than 45 per cent. For the same years, the proportion in the metals and metal products group fell from about 67 per cent to about 35 per cent. In the mining and quarrying group, the proportion fell from about 40 to 25. This means that concerns in this industry had, in 1920, about two chances out of five of making a profit; but in 1921, the chances were reduced to one in four. All these facts are revealed by the reports of the Treasury Department on *Statistics of Income.*

In considering these figures and all others that are used as a basis for taxation, we must make allowance for the fact that they are drawn up under the strong temptation to make income appear as small as possible; and for the further fact that, as a matter of business policy, many corporations are not expected to show profit, but are conducted for the profit of other corporations. We must also bear in mind the fact, to be considered presently, that *aggregate* figures for thousands of corporations, some very large and some very small, are useless for certain purposes and misleading for others.

Nevertheless, statistics which are prepared for purposes other than taxation support our main conclusions concerning business losses. From a study of the profits and losses of 934 firms, recently completed by the Standard

TABLE I. INDEX OF BUSINESS PROFITS IN THE UNITED STATES

(In dollar figures, showing for each group the dollars earned on each $100 of capital. From the Standard Statistics Company of New York)

SECTION A. (*For Section B, see Appendix*)

	No. of Co's	1923 $	1922 $	1921 $	3-YEAR WEIGHTED AVERAGE $
ALL GROUPS	934	6.75	5.75	3.50	5.75
ENTIRE INDUSTRIAL GROUP	704	7.75	6.50	2.25	6.50
Automobiles	26	15.50	12.50	d6.75	12.00
Automobile accessories	31	15.75	14.75	4.50	14.25
Building materials, supplies and real estate	42	12.00	8.75	3.75	9.75
Chemicals	21	9.50	7.25	4.00	7.75
Clothing	17	9.75	10.25	4.50	9.00
Coal	19	4.00	2.75	3.25	3.50
Copper and brass	34	3.50	.75	d2.75	1.75
Electrical equipment	10	10.00	8.75	6.75	9.25
Express, trucking and warehouse	6	6.50	5.50	5.00	5.75
Farm implements	9	2.25	d.25	d2.25	.75
Fertilizer	5	1.75	1.75	d10.75	d.75
Food products	52	9.50	8.00	1.50	7.50
Gold and silver	20	8.00	9.50	6.75	8.75
Household supplies	20	13.00	12.25	d.75	11.00
Lead, zinc, nickel	10	6.00	4.00	d1.00	4.50
Leather	4	d4.00	3.50	d10.50	d2.50
Machinery	22	7.75	4.25	d1.25	4.75
Office and business equipment	13	8.00	5.50	2.50	6.25
Oil	83	6.25	7.25	5.00	6.50
Paper	14	7.00	2.00	0.00	4.00
Printing, publishing and printing equipment	11	7.75	7.25	7.00	7.50
Railroad equipment	21	11.00	6.00	5.00	8.00
Retail trade	55	12.25	10.25	1.75	9.75
Shipping and shipbuilding	14	2.25	3.75	3.75	3.00
Shoes	5	10.75	11.25	5.50	10.00
Steel and iron	47	6.50	3.00	2.00	4.75
Sugar	23	9.75	3.25	d10.75	5.00
Textiles — cotton goods	14	5.25	2.25	3.75	3.50
Textiles — woolen goods	4	5.75	5.25	3.00	5.50
Textiles — miscellaneous	4	9.00	8.50	1.50	7.50
Theaters	4	7.00	6.50	7.00	7.00
Tires and rubber goods	12	6.25	7.00	d3.50	5.00
Tobacco	20	10.00	11.00	10.00	10.50
Miscellaneous	12	13.50	13.25	8.50	12.75
ENTIRE PUBLIC UTILITY GROUP	157	6.75	6.50	5.75	6.50
Electric light, power, gas, water, etc.	119	7.00	6.75	5.75	6.75
Telephone and telegraph	13	7.00	7.25	6.75	7.00
Traction	25	5.00	4.75	4.25	4.75
ENTIRE RAILROAD GROUP	73	5.00	4.25	4.25	4.75

[d] Deficit.

Statistics Company of New York (Table 1, page 106), it is evident that during the three years, 1921–23, many branches of industry failed to earn as much as 5 per cent on their capital. Among these unfortunate industries were coal, copper and brass, farm implements, fertilizers, lead, zinc and nickel, leather, machinery, paper, shipping, steel and iron, and cotton goods. Exactly what the losses were, it is impossible to tell, since some reports do not show exactly what is covered by the terms 'capital,' 'net earnings,' and 'depreciation.' But of this there is no doubt: a large proportion of the individual firms in these groups did not receive a return on their capital, during this three-year period, equal to the current rate of interest on savings bank deposits. And of this further fact there is no doubt: at the end of 1921, many industries as a whole had nothing but deficits to show as a reward for the year's labor. The deficit in the copper and brass industry appears to have been 2.75 per cent of the capital; in the rubber goods industry, 3.50 per cent; in the automobile industry, 6.75 per cent; and in the fertilizer, leather, and sugar industries, above 10 per cent. Other industries that suffered losses in 1921 were farm implements, household supplies, lead, zinc and nickel, and machinery.

The Number of Business Failures varies widely

The precarious nature of business enterprise is further revealed in the records of business failures. In the United States, in good years, nearly one per cent of all the concerns engaged in business fail; in bad years, as Figure 5 (page 84) shows, the proportion of failures is much larger. Figure 4 (page 83), shows that in no quarter of 1919 did the number of business failures reach *two* thousand; but in every quarter of 1922, the number

exceeded *five* thousand. The chart shows that, even in the heights of general prosperity, there are each year many thousands of business failures.

Figure 6 (page 85) shows, by classes of establishments, the twelve-month moving monthly averages for the number of business failures, 1914–24. A glance at the chart shows that from 1916 to 1922 a powerful force was brought to bear on all industry. The outstanding feature of the chart is the uniformity with which the lines for failures in the various branches of manufacture and of trading follow the rapid changes in the purchasing power of the dollar. During that period, the multitude of special causes which ordinarily affect the profits and losses of various industries in different ways were nearly overwhelmed by the preponderating influence of disastrous and unprecedented changes in the value of money.

Nevertheless, a closer examination of Figure 6 will show that, even during the ten-year period from 1914 to 1923, there are among the various classifications some notable differences in the trend of business failures. In the three years that precede the crest of prices, the iron, steel, and machinery group appears to be only slightly affected by the general movement. The trend of failures among traders in clothing and furnishings is not the same as the trend for general stores. During 1916 and 1917, the line for lumber and lumber products moves upward while the lines in general move downward. After the break in prices, the failures among manufacturers of cloths and clothing increase much more rapidly than failures in general. A study of the chart will reveal other differences.

Conclusion

Business losses are enormous. Annually, in the United States they amount to several billion dollars. These

losses can be greatly reduced; but in a living society they cannot be eliminated.

Some of these losses are the price we have to pay for progress. Sometimes all that is invested in getting ready to patent a new process, or to manufacture a new air brake, or to publish a new encyclopedia is a total loss because somebody reaches the market first with a better product. Corner grocers fail because chain stores and mail-order houses develop cheaper methods of distribution. Mines are abandoned because richer mines are discovered. Machines are scrapped because more efficient machines are invented. Ships rot at the wharves because faster ships take their places. Textbooks are discarded because better books are written. Such losses could be avoided only in a static society. As long as consumers have freedom of choice, and private enterprises are free to compete for their patronage and to create new desires, and individual initiative is encouraged by the prospect of profits, business must run risks and suffer losses.

Somebody must pay these losses. In the present industrial order they are paid largely by a small proportion of the population, as a penalty for their failure to compete successfully in the struggle for profits. In a different industrial order this problem would appear in different guise, but it would still be a problem. Radical reformers overlook it in theory, but they could not in practice. Under communism many of the risks discussed above would remain, and others would be added. Furthermore, at least some economic activities would be as badly managed as they are to-day. Society would suffer thereby just as much as though the net results of inefficient management were called business losses. In a communistic State such losses, now borne by comparatively few individuals, would be distributed, theoretically, over the entire population.

In a State which operated only a few of its industries, free from competition, the problem might be solved for these industries by fixing prices on a monopoly basis, or by paying deficits out of tax receipts; that is to say, by appropriating for the use of State enterprises whatever was needed of the profits realized by private enterprises. Thus, the United States Government covered the losses due to its management of the railroads. But no government could operate *all* industries in this way. In some form or other, the problem of vast business losses would persist in any conceivable, progressive, industrial order.

CHAPTER XII

PROFITS VARY WIDELY

THE idea prevails that there is a 'normal' rate of profit, a rate around which at any one time the rates of various industries tend to cluster. If the rate of return in any field is much higher than the average, it is said, more enterprisers will enter the field, and the rate will fall, and *vice versa;* so that in the long run rates always tend toward an equality. Whether or not there is a statistical basis for this traditional theory concerning long-run rates, the theory has little bearing upon the practical problems of any given year, or any two or three years. In the past, economists have been concerned mainly with long-run rates; here we are considering short-run rates.

Many current proposals for taxing business, regulating railroad tariffs, controlling prices, fixing interest rates, and turning private business over to the Government are based on the assumption that there is a certain rate of profit that business men ordinarily receive. If any of them fail to realize the 'normal' return, they are supposed to be reckless risk-takers. If any succeed in obtaining far larger returns, they are condemned as 'profiteers.' Evidently many who use that vague epithet are convinced that business men do not gain much more than the 'normal' rate of profit except through reprehensible means.

As a matter of fact, among successful enterprises there are extremely wide variations in profits. War and the weather, fashions and finance, politics and business cycles do not affect in the same degree the profits of any two industrial groups or of any two individual concerns. Not only does the sum total of business profits fluctuate widely from time to time, but also the profits of the vari-

ous industries and of different concerns in the same industry. In any given year some industries suffer while others prosper; some concerns in a given industry succeed while others fail; and certain branches of a given industry fare much better than others. Each of these evidences of the precarious nature of business enterprise is of such practical importance that we shall do well to consider it in some detail.

Net Corporate Income varies greatly

The total net income of all reporting corporations in the United States varies greatly from year to year. These variations for a period of fourteen years are shown in Table 2 and in Figure 7. The bars in the chart show that,

TABLE 2. FLUCTUATIONS IN NET INCOME OF CORPORATIONS IN THE UNITED STATES [1]

(Including profits and other kinds of income)

YEAR	Total Number of Returns	Returns showing Taxable Income	Returns showing no Taxable Income	Net Income	Increase or Decrease from Year to Year [a]
1909	262,490	[b]52,498	209,992	$3,590,000,000	.....
1910	270,202	[b]54,040	216,162	3,761,000,000	$171,000,000
1911	288,352	[b]55,129	233,223	3,503,000,000	−258,000,000
1912	305,336	[b]61,116	244,220	4,151,000,000	648,000,000
1913	316,909	188,866	128,043	4,714,000,000	563,000,000
1914	[c]299,445	174,205	125,240	3,940,000,000	−774,000,000
1915	[c]366,443	190,911	175,532	5,310,000,000	1,370,000,000
1916	341,253	206,984	134,269	8,766,000,000	3,456,000,000
1917	351,426	232,079	119,347	10,730,000,000	1,964,000,000
1918	317,579	202,061	115,518	8,362,000,000	−2,368,000,000
1919	320,198	209,634	110,564	9,412,000,000	1,050,000,000
1920	345,595	203,233	142,362	7,903,000,000	−1,509,000,000
1921	356,397	171,239	185,158	4,336,000,000	−3,567,000,000
1922	382,883	212,535	170,348	6,963,000,000	2,627,000,000

[1] *Statistics of Income from Returns of Net Income for 1921*, United States Treasury Department, Washington, D.C., 1923; p. 19.

[a] A minus sign indicates decrease.

[b] Returns showing net income in excess of $5,000 exemption.

[c] 1915 contains approximately 30,000 returns showing no net income which properly belong and should be included in 1914. (See *Annual Report Commissioner of Internal Revenue*, 1916; p. 26.)

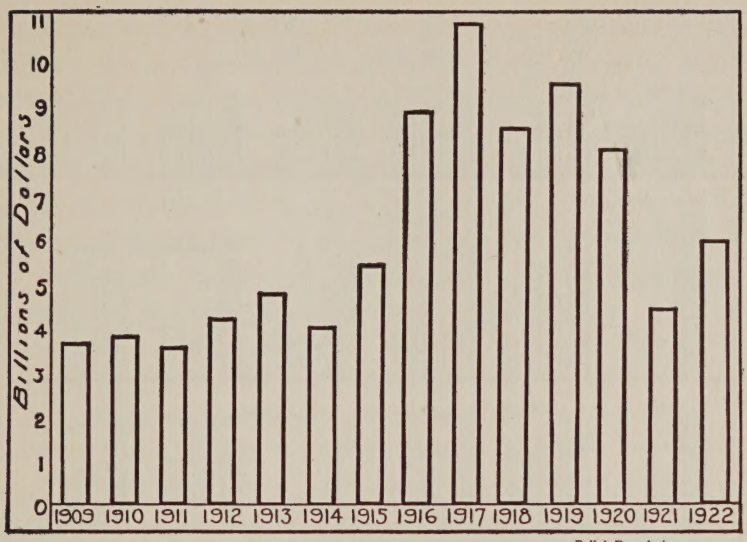


FIGURE 7. NET INCOME OF ALL REPORTING CORPORATIONS IN THE UNITED STATES, 1909–21

(Data from *Statistics of Income*, Report of the Treasury Department for 1921; p. 19)

in 1914, net income fell off nearly eight hundred million dollars, but increased the next year more than one billion. In 1916, the increase over the previous year, and in 1921, the decrease over the previous year, was about three and one half billion. In 1917, net income rose far above ten billion; but in 1921 it fell to four and one third billion. In five years out of twelve, from 1910 to 1921, the net income of corporations was less than in the previous year. After deducting the deficits of the unsuccessful corporations from the net income of the others, we have, for the year 1920, net income for all reporting concerns of nearly six billion dollars; but, for the year 1921, we have less than half a billion.

This picture of the fortunes of industry as a whole shows only dollar income; but even if we correct the

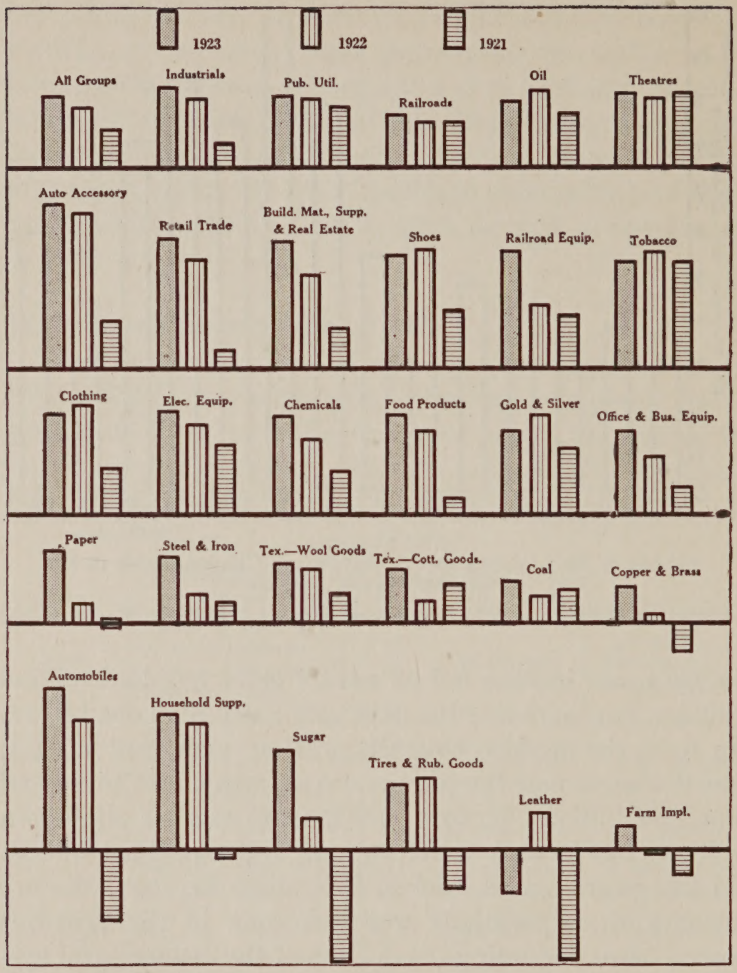


FIGURE 8. TREND OF PROFITS IN LEADING INDUSTRIES IN THE UNITED STATES, 1921–23

(From the Standard Statistics Company of New York, *Standard Daily Trade Service*, October 27, 1924)

figures for fluctuations in the purchasing power of the dollar (using the Federal Reserve Bank of New York index of the general price-level), we find wide variations in net corporate income. Reckoned in 1913 dollars, the total for all reporting corporations was 3.90 billion in 1914, 7.66 billion in 1917, and 2.46 billion in 1921. In other words, the net income of all reporting corporations, in purchasing power, for the year 1917 was 96 per cent *above*, and for the year 1921, 37 per cent *below*, the level of the year 1914. There is nothing in these figures to suggest the possibility of a normal rate of profit.

The wide range from year to year in rates of profit of business as a whole is shown by the financial reports of

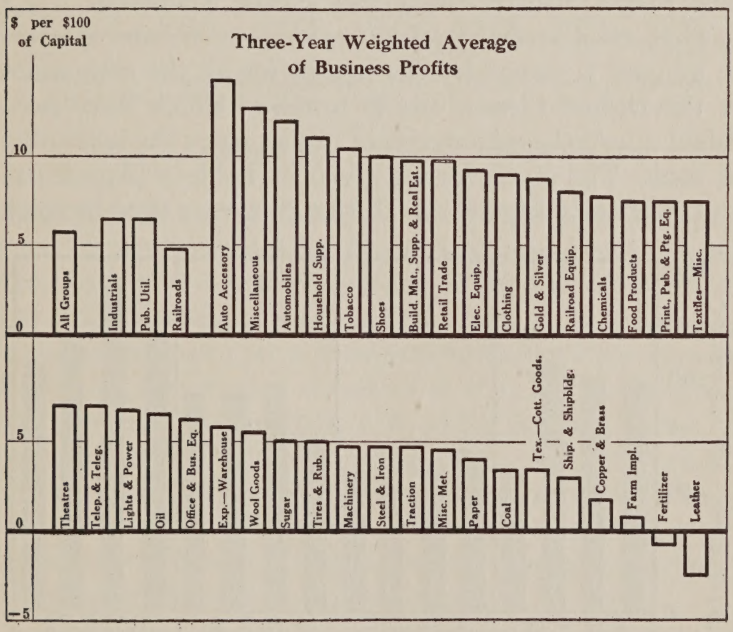
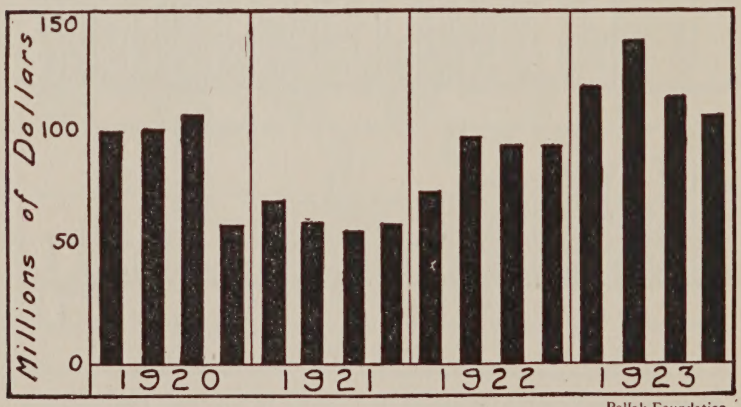


FIGURE 9. WEIGHTED AVERAGE OF PROFITS IN LEADING INDUSTRIES 1921–23
(From the Standard Statistics Company of New York. See Table 1)

934 concerns in the United States for the years 1921–23. These reports, as summarized by the Standard Statistics Company of New York (Table 1 and Figure 8), show that the average profit on each $100 of capital rose from $3.50 in 1921 to $6.75 in 1923. The profits of the 704 industrials in this group covered even wider ranges than the average. At $7.75 in 1923, the average profit of the industrials was 244 per cent above the record of 1921. Any period of inflation brings still higher profits to business as a whole. In the year 1917, for example, the average return on capital, according to one estimate, covering 108 trades and industries, was 24.75 per cent.[1]

Total Profits fluctuate widely from Quarter to Quarter

That total profits fluctuate widely even from quarter to quarter is shown by the figures for all the companies in the United States, 164 in number, which have published quarterly statements of profits since the beginning of 1920. The statistics are given in Table 3 (Appendix) and charted in Figure 10. During the years 1920 to 1923,



Pollak Foundation

FIGURE 10. NET QUARTERLY PROFITS OF 164 CONCERNS IN THE UNITED STATES, 1920–23
(Data from *Monthly Review*, Federal Reserve Bank of New York)

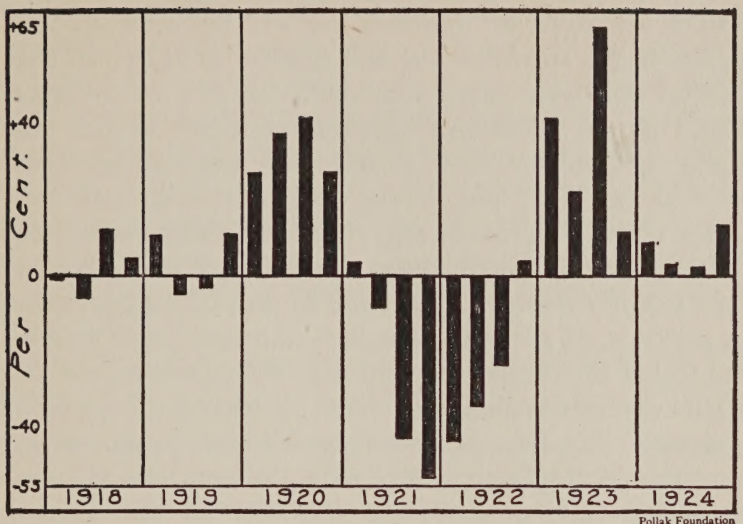


FIGURE 11. QUARTERLY INCREASES AND DECREASES OVER PRECEDING QUARTERS IN NET PROFITS OF INDUSTRIALS IN GREAT BRITAIN, 1918–24

(Data from Quarterly Reports published in the *London Economist*)

the quarterly net profits of these 164 concerns, as tabulated by the Federal Reserve Bank of New York, ranged from 54.8 million dollars, in the third quarter of 1921, to 136 million, in the second quarter of 1923. Profits in the fourth quarter of 1920 were about half what they were in the third quarter; they remained at that low level during 1921, began to rise in 1922, and, in the second quarter of 1923, reached a peak nearly 150 per cent above the lowest quarter of the four years. A comparison of these fluctuations, as depicted in Figure 10, with Figure 57 (page 389), shows a close correspondence between the general movements of profits and of volume of trade.

The extreme variations in the profits of industrials in England in recent years are shown in Table 4 (Appendix) and Figure 11, where the increases and decreases in net

profits are given by quarters. It will be observed that profits began to rise in the last quarter of 1919. In that quarter they were 10 per cent above the previous quarter. Then, in the successive quarters of 1920, profits rose higher and higher; first 26 per cent, then 37 per cent, then 41 per cent, and, in the last quarter, 27 per cent. In the second quarter of 1921, however, profits were 8 per cent below the first quarter. In the next five quarters, they fell off rapidly: 42 per cent, 52 per cent, 43 per cent, 33 per cent, 23 per cent. The last quarter of 1922 marked the end of the decline, and during the next year, the upward movement continued. Since, however, this chart of quarterly increases and decreases in net profits of industrials in England covers only the concerns that reported in each quarter, the statistics for the various quarters are not strictly comparable. They are not unlike all our other statistics, however, in showing wide variations; certainly there is nothing in the picture that can be called normal.

The Fortunes of Each Industry vary from Time to Time

From the average rate of profit of business as a whole, we cannot make even a good guess concerning the average rate in a given industry. For each industry has its own ups and downs, which seem at times to have little relation to the fortunes of business in general. In the canning industry, for example, the average rate of profit earned on the capital stock, according to one estimate, was 4.5 per cent in 1914, 32.2 per cent in 1917, and 14.9 per cent in 1918. (See Table 5, Appendix.) The average profits of coke producers appear to have ranged, during the years 1915 to 1918, from 13.3 per cent up to 81.9 per cent, and then down to 17.9 per cent. The rate of profit for shipbuilders was only 3 per cent in 1914, but above 30 per

cent in 1918. The rate of profit in the lumber industry rose from 1.1 per cent in 1914 to 11 per cent in 1917, but fell the following year to 3.2 per cent. The rate of profit of shoe manufacturing companies appears to have been nearly twice as high in 1916 as in 1915, and nearly twice as high in 1919 as in 1918.[2] That these wide, variable, and unpredictable fluctuations in the fortunes of industries are the rule rather than the exception, at least during war years, is evident from a glance at Table 5 (Appendix).

Profits in most industries also vary widely in time of peace. The profits of the 36 industrials shown in Figure

TABLE 6. NET ANNUAL PROFITS OF CORPORATIONS BY INDUSTRIES, 1919–1923 [a]

(In millions of dollars)

GROUP	No. OF CORPORATIONS	1919	1920	1921	1922	1923	1924
1. Steel and railroad equipment	11	111	149	40	50	150	115
2. Motor and accessories	15	116	78	[d]42	90	120	101
3. Oils	8	14	19	11	15	11	12
4. Food and food products	16	71	86	[d]5	63	86	82
5. Clothing (including leather and textiles)	10	32	22	16	25	31	21
6. Tobacco	6	29	33	39	47	46	49
7. Miscellaneous industrials	31	73	70	30	61	86	81
8. Stores	12	59	12	[d]10	49	64	56
9. Total 8 groups	109	505	469	79	400	594	517
10. Telephone	70	77	82	107	126	136	151
11. Other public utilities	24	62	71	66	90	104	113
12. Total public utilities	94	139	153	173	216	240	264
13. Total 10 groups	203	644	622	252	616	834	781
14. Class I railroads	193	516	58	616	777	978	987

[a] Federal Reserve Bank of New York, *Monthly Review.*
[d] Deficit.

12 fell from 73.5 million dollars in the third quarter of 1920, to 15.7 million in the third quarter of the following year; but rose again to 63.8 million in the corresponding quarter of 1923. The profits of the 128 public utilities, though much more stable, fell from 59.5 million in the first quarter of 1923 to 49.1 million in the third quarter. Similar variations appear in the yearly net profits of the 94 utilities and 95 industrials which are included in Table 6 and Figure 22 (page 136). The profits of the utilities rose steadily from 139 million in 1919 to 240 million in 1923; while the profits of the industrials (with steel and railroad equipment concerns omitted) fell from 320 million in 1920 to 39 million in 1921, and rose to 350 million in the following year. The profits of the motors group fell from 6.9 million in the first quarter of 1920 to a deficit in the fourth quarter of 1921. Then, in the second quarter of 1923, they rose to 12 million. The profits of the iron and steel group, which were above 30 million in each quarter of 1920, were less than one million in the last

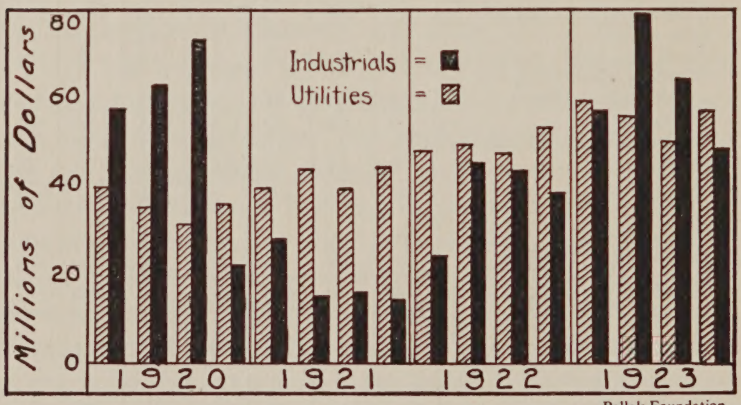


FIGURE 12. NET PROFITS OF 36 INDUSTRIALS AND 128 UTILITIES, 1920–23
(From *Monthly Review* of the Federal Reserve Bank of New York, March 1, 1924)

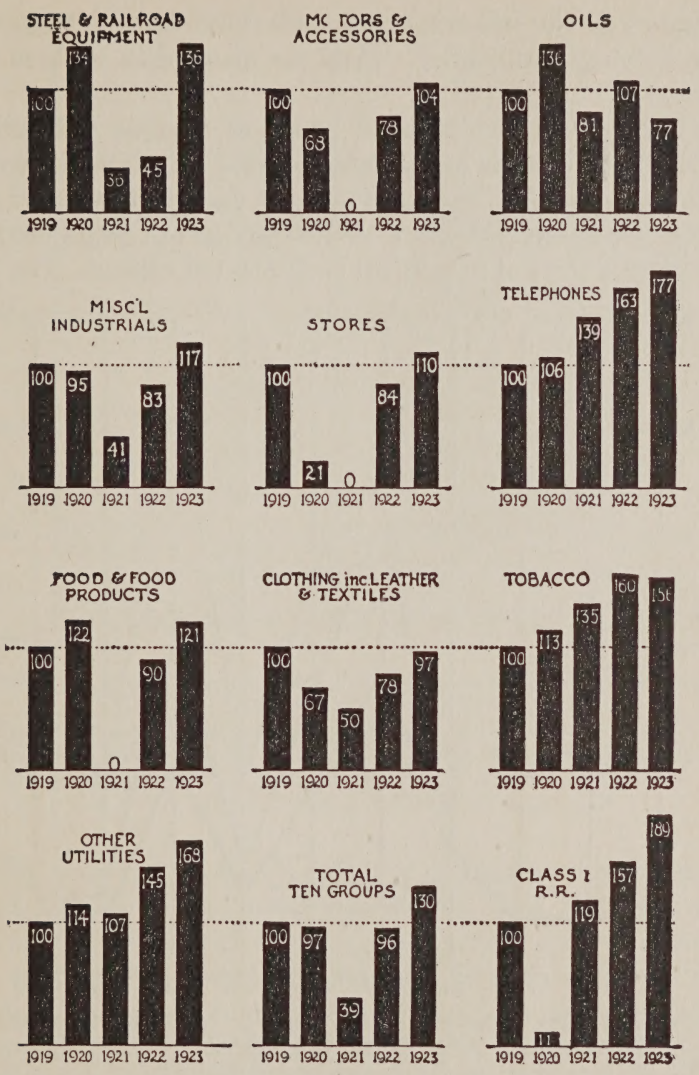


FIGURE 13. ANNUAL NET PROFITS OF 203 MANUFACTURING, MERCHANDISING, AND PUBLIC SERVICE CONCERNS, AND OF 193 CLASS I RAILROADS, 1919–23

(From *Monthly Review* of the Federal Reserve Bank of New York, March 1, 1924. Profits in 1919 = 100 per cent)

quarter of the following year. All these figures are given in Table 3 (Appendix). They are charted in Figures 12 and 13.

Changes in the rates of profit of various industries from 1921 to 1923 are shown in Table 1 and in Figure 8. The reports of the 26 automobile concerns included in this compilation reveal a deficit for 1921 of $6.75, and a profit for 1923 of $15.50, on each $100 of capital. The 23

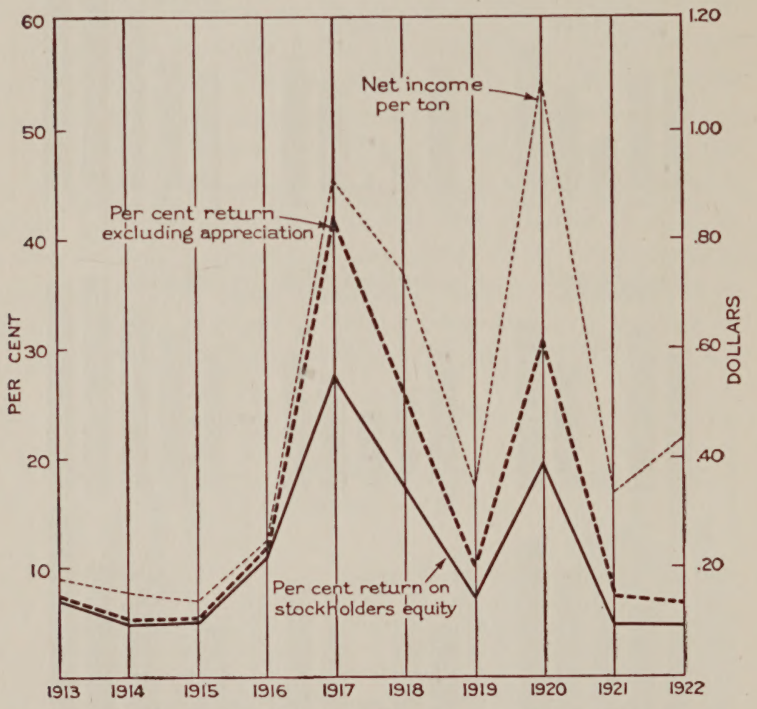


FIGURE 14. FLUCTUATIONS IN THE PROFITS OF 52 LARGE BITUMINOUS COAL OPERATORS, 1913–22

The solid line represents per cent of return, before deducting Federal taxes, on stockholders' equity, including appreciation of values of coal-bearing land and other assets. Deducting these appreciations of value, the income on stockholders' equity is as shown by the heavier broken line.

(From the chapter on 'Fluctuations in Coal Production,' by David L. Wing and F. G. Tryon, in *The Problem of Business Forecasting*, Pollak Publication Number 6; p. 215)

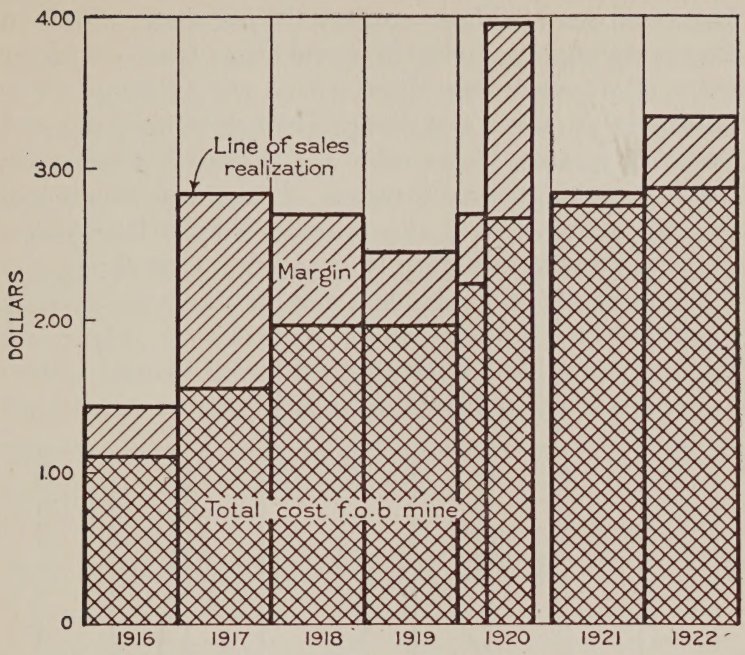


FIGURE 15. FLUCTUATIONS IN PER TON COST, SALES REALIZATION, AND MARGIN OF 127 BITUMINOUS COAL OPERATORS

The operators shown are all in the Northern Appalachian region. They are identical for each year except 1919 and 1920, for which years reports of 123 operators have been interpolated, of whom 49 were common to the group of 127 operators.

(Figure 15 is from *The Problem of Business Forecasting;* p. 209)

sugar concerns showed a deficit of 10.75 per cent in 1921 and a profit of 9.75 per cent in 1923. The leather concerns rose from a deficit of 10.5 per cent in 1921 to a profit of 3.5 per cent in 1922, and then, in 1923, fell back to a deficit of 4 per cent. All these ups and downs are in marked contrast with the stability of earnings for the same years of the tobacco, printing, and theater groups.

Figure 14 shows the marked fluctuations, 1913 to 1922, in the profits of 52 large bituminous coal operators. Whether we consider net income per ton, or per cent of

return on stockholders' equity, or per cent of return after excluding appreciation of values of land and other assets, the variations since 1916 are extreme. The changes in the costs and margins of 127 bituminous coal operators from 1916 to 1922 are shown in Figure 15. Considering the yearly fortunes of the bituminous coal industry in relation to the average for the four years, 1918–21, we note in Figure 18 (page 128) that the profits of operators and of wholesalers rose far above the average in 1920, and fell far below the average in 1921. Figure 16, which records the fluctuating fortunes of 84 coal wholesalers for a ten-year period, is another picture of instabil-

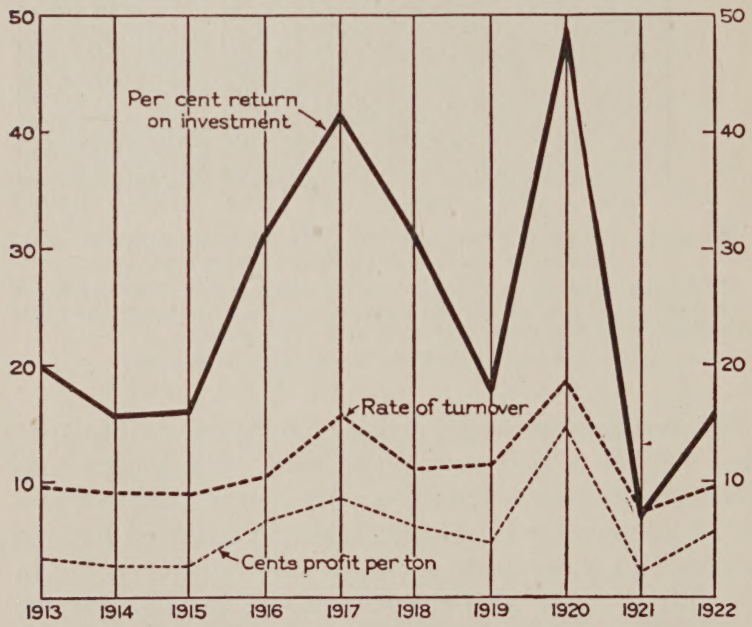


FIGURE 16. FLUCTUATIONS IN THE PROFITS OF 84 COAL WHOLESALERS

Includes all companies reporting for each year of the ten-year period 1913–22, some of which handled anthracite. See Figure 44 in *The Problem of Business Forecasting;* p. 209.

(From an unpublished report of the United States Coal Commission)

ity. The data for these four figures are from an unpublished report of the United States Coal Commission.

The profits of 249 industrial and mining companies, according to an exhibit presented to the President's Coal Commission, rose from 7.2 per cent on the capital stock, in 1914, to 24.2 per cent, in 1916; and fell, in 1918, to 16.1 per cent. (Table 7, Appendix.)

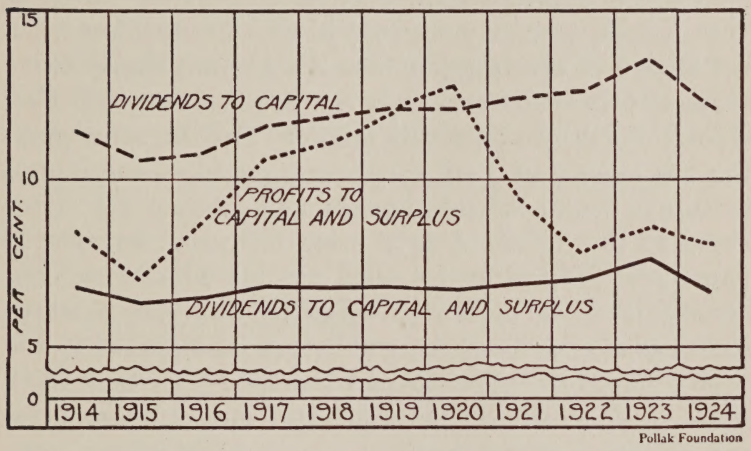


FIGURE 17. PROFITS AND DIVIDENDS OF NATIONAL BANKS, 1914–24
(Plotted from the data in Table 8, Appendix)

The aggregate profits of national banks do not fluctuate so widely. From 1914 to 1923, according to reports of the Comptroller of the Currency, summarized in Table 8 (Appendix), and charted in Figure 17, the net addition to profits of national banks did not fall below 7 per cent on capital and surplus, or rise as high as 13 per cent.

Profits vary widely among Concerns in the Same Industry

An industry is often regarded as highly prosperous because of the success of certain conspicuous representatives, though others are far from successful. The auto-

mobile industry, for example, has brought large profits to some producers and total failure to others. In 1921 ten automobile manufacturers showed deficits ranging from 6 per cent to 75 per cent; and fourteen other concerns showed profits ranging from one half of one per cent to 15 per cent. In 1923, the profits of twenty-eight concerns ranged from one half of one per cent to 44 per cent.[3] The metal industries have a similar record. For the year 1921, about 5500 corporations in that group reported a net income of about 437 million dollars; but nearly twice as many other corporations in the same industry reported a total deficit of about 666 million. For the same year, the net income of 7207 concerns engaged in the manufacture of food products, liquors, and tobacco was about equal to the deficit of 6570 other concerns; and in the paper and pulp industry what 730 manufacturing concerns gained was more than offset by what 946 concerns lost.[4] In every one of the 108 industries included in the Senate report on corporate earnings for 1917, one or more firms earned over 30 per cent and one or more firms earned under 20 per cent.

Profits also vary widely among different stores. Among retail shoe stores in 1922, those with a stock turnover of less than 1.4 times lost 3.4 per cent on net sales; while those with a stock turnover of 2.2 times or more gained 3.9 per cent on net sales.[5] Among retail jewelry firms during the same year, those with a small turnover showed a loss of 4.6 per cent; those with a larger turnover showed a profit of 1.4 per cent.[6] In the wholesale grocery business, 442 firms gained a net profit on net sales in 1922 of about one half of one per cent.[7] In this same year, 151 large department stores showed a profit of 3.4 per cent on net sales; while for 161 small stores the profit was less than one tenth of one per cent.[8]

There is no usual rate of profit even among highly competitive banks in the same city. The earnings on capital and surplus of ten of the largest banks in New York City for the year 1919 ranged from 10.4 per cent to 35.7 per cent. The earnings of commercial banks, according to reports of the Treasury Department, ranged from nothing to 75 per cent. The dispersion is so wide that even if we take as broad a mode as eight to sixteen per cent, we leave out over half the cases.

Still further to show the wide range of profits among individual concerns in the same industry at the same time, we present in Table 9 some figures taken at random

TABLE 9. NET INCOME OF INDIVIDUAL CONCERNS ON INVESTED CAPITAL AFTER TAXES, IN 1917 [1]

NUMBER	GROUP	RANGE OF NET INCOME
309	Coal mining (bituminous and lignite)	From 13 per cent to 329 per cent
1616	Commercial banks	From 2 per cent to 52 per cent
802	Contractors	From 3 per cent to 5530 per cent
150	Dairying, etc.	From 5 per cent to 172 per cent
309	Department stores	From 6 per cent to 54 per cent
1633	Grocers, etc.	From 4 per cent to 176 per cent
199	Hotels	From 2 per cent to 1099 per cent
33	Savings Banks	From 13 per cent to 26 per cent
148	Shoe manufacturers	From 6 per cent to 149 per cent
142	Stock breeding	From 4 per cent to 69 per cent
287	Theaters	From 3 per cent to 4024 per cent

[1] Compiled from Senate Document No. 259, 65th Congress, 2d Session.

from an extensive Senate Report on *Corporate Earnings and Government Revenues*. According to this report, one hotel earned above one thousand per cent on invested capital in 1917, while another earned only two per cent; one theater earned above four thousand per cent, while another earned only three per cent; and one contractor earned above five thousand per cent, while another earned only three per cent.

Another fact of great practical importance, revealed by corporation balance sheets, is that there are wide variations in the fortunes of different branches of the same industry. In the bituminous coal industry, for example, the profits of wholesale dealers range much further above the average in good years, and much further below the average in bad years, than do the profits of retail dealers; while the profits of operators, both in prosperity and in depression, occupy a mean position between the profits

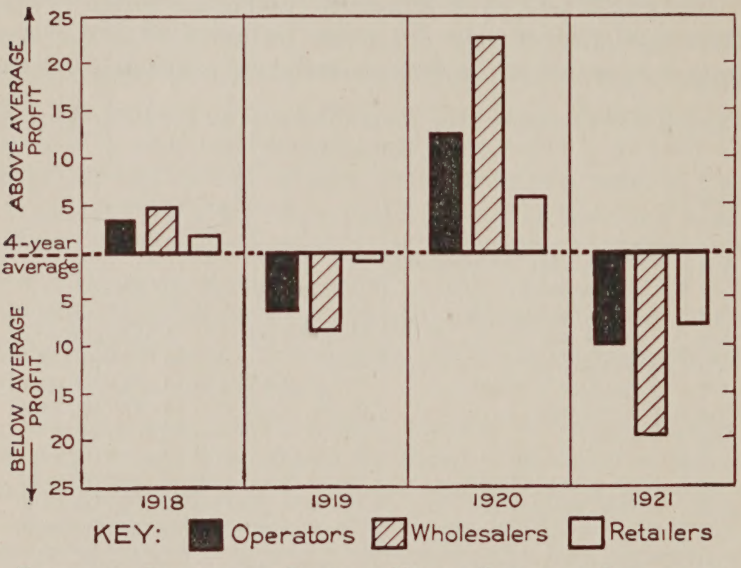


FIGURE 18. COMPARATIVE RANGE IN YEARLY PROFITS OF BITUMINOUS COAL OPERATORS, WHOLESALERS, AND RETAILERS, 1918–21

The data for operators are from the unaudited Federal tax returns of 1234 bituminous coal producers, and represent per cent of net income to invested capital before deducting tax.

The data for wholesalers are for 84 identical companies (including a few companies handling chiefly anthracite) reporting to the United States Coal Commission; and represent return on total investment.

The data for retailers are for 118 companies in the Central, Southern, and Far Western States (regions where retailers handle chiefly bituminous coal) and represent return on total investment.

(Figure 18 is from *The Problem of Business Forecasting*, Pollak Publication, Number 6; p. 218)

of wholesalers and the profits of retailers. In other words, fluctuations above and below average profits are greatest for wholesalers, less for operators, and least for retailers. These facts are depicted in Figure 18.

Profits of Large Concerns fluctuate widely

The rate of profit of the American Telephone and Telegraph Company in recent years has varied little. The earnings per share have been as follows: in 1924, $11.26; in 1923, $11.35; in 1922, $11.14; in 1921, $11.10; in 1920, $11.72. This record of stability, however, is in marked contrast with the records of most concerns. It is, in fact, without parallel. It is the result of causes which are not operative in the case of most corporations.

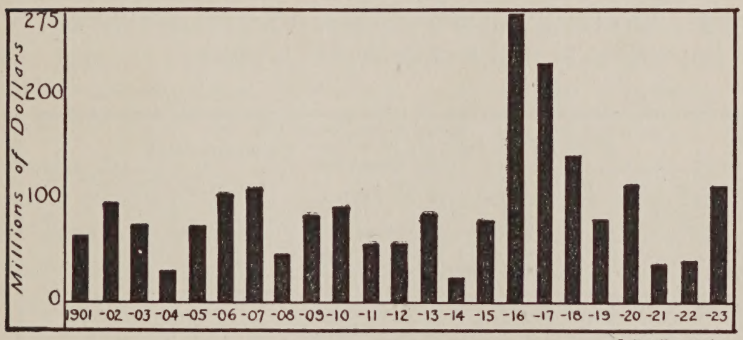


FIGURE 19. NET ANNUAL PROFITS OF THE UNITED STATES STEEL CORPORATION, 1901–23
(From the Annual Reports of the Corporation)

The net profits of the United States Steel Corporation rose from about 23 million dollars in 1914 to 271 million in 1916; then, in 1921, they fell to 35 million. Figure 19 and Table 10 (Appendix) show how far from steady have been the annual profits of this vast corporation since the beginning in 1901. These marked fluctuations seem to

indicate that the factors which make for high and for low profits in the industry are largely beyond the control of the United States Steel Corporation.

The earnings on capital stock of Swift and Company fell from 46.2 per cent in 1917 to 3.4 per cent in 1920; and the following year there was a loss of 5.2 per cent. Contrasted with earnings of over 34 million in 1917, there was in 1921 a loss of nearly 8 million. Although earnings on investment averaged above 15 per cent for the five-year period, 1914–18, earnings for the next five years averaged less than 4 per cent. (See Table 11, Appendix, and Figure 20.)

These three cases of corporate earnings we offer merely as illustrations of the difficulty of telling from 'average earnings' anything about the earnings of individual concerns. Evidently no one of these concerns is typical. It is impossible to find a case that is typical.

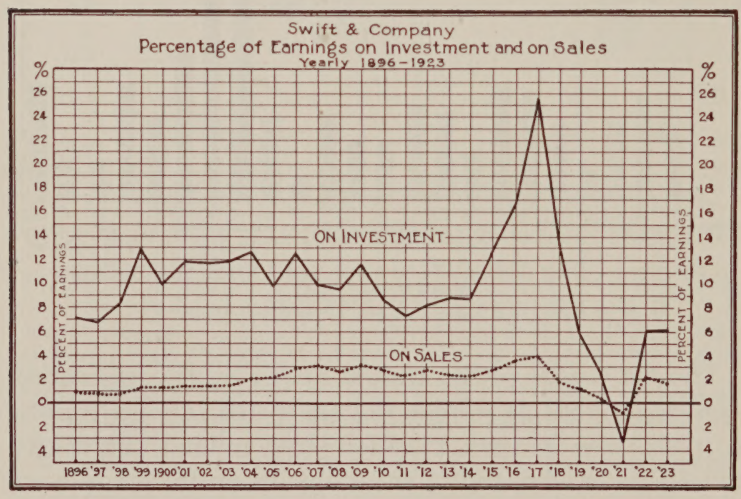

Swift & Company
Percentage of Earnings on Investment and on Sales
Yearly 1896–1923
%
PERCENT OF EARNINGS
ON INVESTMENT
ON SALES
1896 '97 '98 '99 1900 '01 '02 '03 '04 '05 '06 '07 '08 '09 '10 '11 '12 '13 '14 '15 '16 '17 '18 '19 '20 '21 '22 '23

FIGURE 20. EARNINGS OF SWIFT AND COMPANY, 1896–1923

Some Industries prosper and Others suffer in any Given Period

In any given year, the fortunes of some industries are in marked contrast with the misfortunes of other industries. In 1921, according to reports of the Treasury Department, the net income, before deducting taxes, of corporations in the finance, banking, and insurance group was 4.98 per cent of the gross income, but corporations in the rubber industries suffered a loss amounting to 15.13 per cent of their gross income. The printing and publishing group reported a net income, after deducting taxes, of about 70 million dollars; the textile group, about the same. The mining and quarrying group, on the other hand, reported a deficit, after deducting taxes, of about 261 million, and the metal and metal products group, a deficit of 319 million.[9]

The contrast between the gains of some industries and the losses of others in the same year is nowhere more clearly shown than in a chart prepared by the Federal Reserve Bank of New York and here reproduced as Figure 13 (page 121). (See Table 6, page 119.) This chart portrays variations, from the year 1919 as a base, in the annual net profits of 203 manufacturing, merchandising, and public service concerns and 193 Class I railroads. The chart shows that, in the year 1921, the profits of the tobacco group were 35 per cent *above* the year 1919; of the telephone companies, 39 per cent *above;* of the railroads, 19 per cent *above;* while, in the same year, the profits of clothing concerns were 50 per cent *below* those of 1919, and the profits of stores, of the motors group, and of the food group were a minus quantity.

For the year 1923, as Figure 21 and Table 2 (page 112) show, the fortunes of 934 concerns ranged from a profit of above 15 per cent in the automobile group to a deficit of 4 per cent in the leather group. For all groups, the aver-

FIGURE 21. PROFITS OF VARIOUS INDUSTRIAL GROUPS IN THE UNITED STATES IN 1923
(Data from the Standard Statistics Company of New York. See Table 1)

age profit was 6.75 per cent. For eight of the 34 industrial groups, profits were more than 50 per cent above the average; for four, profits were more than 50 per cent below the average.

Rates of Profit vary widely among the Industries

Inflation brings higher rates of profit to business in general; but it also brings higher ranges among the various groups. In the year 1917, for example, the rate of return on capital of 108 trades and industries comprising 26,477 firms, ranged from 8.96 per cent for capitalists to 60.33 per cent for trades brokers. Ten of the 108 trades and industries each earned over 39 per cent and ten earned under 18 per cent.[10] The ten most profitable trades or industries and their several rates of profit were:

	Per cent
1. Brokers	60.3
2. Steel plants and rolling mills	59.0
3. Bolts and nuts	52.5
4. Druggist preparations	52.4
5. Fish canning	45.5
6. Silk throwing	44.8
7. Oils and vegetables	44.5
8. Tin cans and tinware	42.2
9. Castings	41.6
10. Steamship properties	39.5

The ten least profitable trades or industries and their rates of profit were:

	Per cent
1. Furniture, carpets, etc. (stores)	17.7
2. Ice manufacturing	17.3
3. Laundries	16.5
4. Mortgage loans	13.3
5. Light and power companies	12.0
6. Commercial banking	11.8
7. Trust companies	11.2
8. Telephone and telegraph companies	10.6
9. Real estate brokers	9.7
10. Capitalists, including investors, etc.	8.9

The distribution of the rates earned by the 108 industries in 1917 is so wide that no kind of an average is typical.

Profits in England vary widely from Industry to Industry

Still further to illustrate the contrast between the gains of some industries and the losses of others in the same period, we present, in Table 12 (Appendix), the net profits, by industries, of 419 companies in England for the first quarters of 1923 and 1924. It appears that there was little change in the profits of water companies, breweries, and tramways. On the other hand, rubber companies made a gain of 57 per cent and tea companies of 45 per cent, while gas companies found their profits reduced 11 per cent and shipping companies 20 per cent.

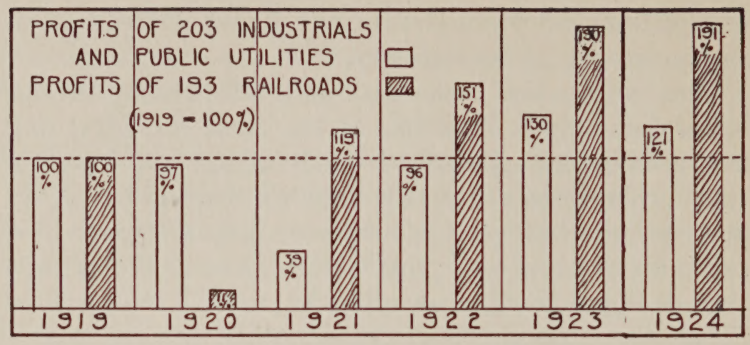
The diverse fortunes of various industries in England during 1923 are recorded in Table 13 (Appendix). This table gives the increase or decrease of 1923 over 1922 in the profits of 1358 companies. While the aggregate profits of 20 nitrate companies fell 55 per cent below those of the previous year, the aggregate profits of 259 rubber companies increased 249 per cent. Among the industries that made any gain at all in 1923, there was a wide and, it would seem, an unpredictable dispersion in the per cent of gain. The fortunes of breweries, stores, trust companies, tramways, and 327 miscellaneous companies do not seem to be closely allied; yet these are the enterprises that realized increases in profits over 1922 of less than 20 per cent. The fortunes of teas and textiles hardly seem to be especially dependent on the fortunes of canals, gas works, and rubber concerns; yet these are the industries in which the profits of 1923 rose more than 65 per cent above those of 1922. But these statistics give only a suggestion of the multitude of diverse, capricious, and

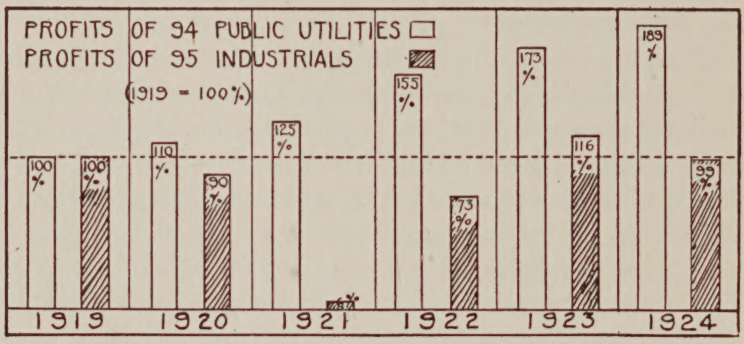
adventitious influences that, at any particular time, affect the profits of a given industry.

Since profits and losses vary so widely among various industries, among branches of the same industry, and among individual concerns in each industry, any *average* rate for business as a whole that we may arrive at, by any method whatever, can have very little meaning. Certainly for any practical purpose it is useless. Worse than that, it is positively misleading.[11]

General Business Depression affects Various Industries in Different Degrees

The major swings of the business cycle bring far greater gains and losses to some industries than to others. In the business slump of 1921, for example, dealers in sugar and in fertilizers suffered losses, on the average, amounting to $10.75 on each $100 of capital; while the electrical equipment industry and the gold and silver industries realized profits amounting to $6.75 on each $100 of capital. (See Table 1.) The profits of public utilities rose steadily through the depression of 1921 until in 1923 they were 173 per cent of the profits of 1919; but the profits of railroads ranged from 11 per cent of the 1919 figures in 1920, to 190 per cent in 1923. (See Figure 22 and Table 6, page 119.) From Figures 14 and 16 (pages 122, 124), it is evident that bituminous coal operators and wholesale coal dealers realized exceptionally small profits in 1919, when business in general was highly prosperous, and exceptionally high profits in 1920, the year in which a major slump in business began. It is easy to understand how such things may happen in an industry which is subject, as coal mining is, to such disastrous and well-known strikes; but nearly every industry has dangers which are peculiar to itself, most of which the public knows little or nothing about.





Pollak Foundation

FIGURE 22. NET PROFITS OF PUBLIC UTILITIES, INDUSTRIALS, AND RAILROADS, 1919–24
(Data from *Monthly Review* of the Federal Reserve Bank of New York)

Steadiness of employment and profits depend, in large degree, on how closely a concern is in touch with the consumers of its products. As a rule, those turning out staples nearly ready for the consumer suffer least from a general slump in business. In the depression of 1921, retail dealers kept 97 per cent of their staffs; hand trades made no reduction at all; and, as Table 1 (page 106) shows, the profits of theaters, tobacco dealers, printers, and telephone and telegraph companies were well sus-

tained. On the whole, small enterprises, as Figure 51 (page 380) shows, suffered less than middle-sized ones; and the middle-sized suffered less than large ones.

The War brought huge profits to some industries and all but ruined many others. The influence of the War on profits is the outstanding feature of Figure 19 (page 129) which gives the profits of the United States Steel Corporation. In the mining and manufacturing group the money gains were exceedingly large, even after the payment of income and excess profits taxes. The earnings of mining and manufacturing corporations in 1917 appear to have been 330 per cent of the earnings in 1913, the highest pre-War year. Next, in point of War profits, were trading corporations. The earnings of banks (if bank reports are reliable guides in this matter) did not increase at so rapid a rate, but were sustained after the profits of other groups began to decline. Railroads and public utilities prospered during the early years of the War, but suffered thereafter. What some industries gained from the War, others lost. The owners of certain kinds of business enterprises increased their profits at the expense of the owners of other kinds. The story is told in the movements of stock prices. In 1920, David Friday called attention to the coincidence that, since 1913, the average price of twenty railroad stocks had declined 37.78 points, and the average price of twenty industrials had increased 37.46 points. Thus it appears that the extraordinary profits enjoyed by stockholders in concerns that benefited by the War were largely at the expense of people with relatively fixed salaries and owners of bonds and railroad and public utility stocks.[12]

During the War year 1917, as Dr. Friday points out, the fortunes of different industries varied widely. Most of the net income of railroads and public utilities was at

a lower rate than 10 per cent. In banking, the largest income was in the 10–15 per cent group. In manufacturing, mining, and merchandising, the income of the 40–50 per cent group was conspicuously larger than that of any other group; while in transportation by water, the income of the 75–100 per cent group was far the largest. In each industry, however, the dispersion was wide: there was no rate of profit that could be called normal.

Even if we lose sight of these wide variants among individual firms and among industries, by considering only firms that do business throughout the country, and throwing all industries into one group, and excluding the 25 per cent of the firms having the highest rates of profit and the 25 per cent having the lowest rates, and taking average profits for a decade, still we find no evidence of a normal rate of profit. A study of this kind by William F. Dunn,[13] covering about 500 companies for the years 1913–23, gives the average rate of profit of the quartile above the median as 14.7 per cent, and of the quartile below the median as 4.7 per cent. The statistics are charted in Figure 23. This appears to be as good a case as can be made out for a normal rate of profit; yet a glance at the chart shows that even the 50 per cent of firms that are closest to the median show among themselves each year, and as a whole from year to year, such divergences in rates of profit that the median of 8.9 per cent for the entire period has little practical significance.

A table prepared by Robert S. Brookings gives the average earnings of twenty large industrial corporations, from 1919 to 1923, as 7.75 per cent on their invested capital; but the range among the twenty for this five-year period, even with the wider annual divergences thus smoothed out, is from −3.18 per cent to 18.17 per cent.[14]

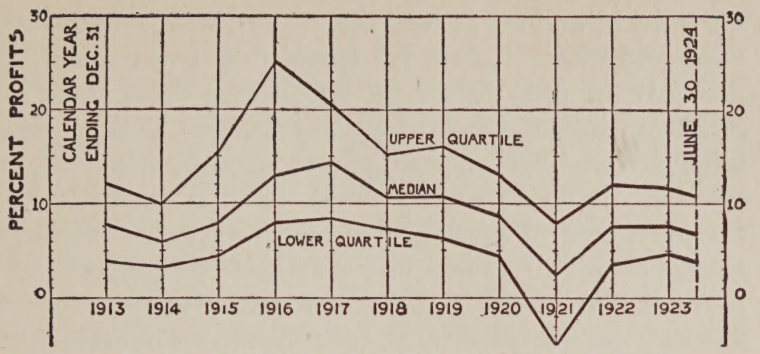


FIGURE 23. PROFITS OF 500 SELECTED COMPANIES
(From *Bradstreet's*, October 11, 1924)

There is no Normal Rate of Profit

From these facts, it is evident that, for any one year or for any series of five or even ten years, there is no normal rate of profit. The profits of each industry vary widely from quarter to quarter and from year to year. This is also true, with few exceptions, of individual concerns, and of various branches of the same industry, and of business as a whole. In any given year some concerns prosper while others in the same industry suffer losses; some industries flourish while others fail; some parts of the country show exceptionally large profits while other parts show exceptionally large deficits. Nor is there, in the course of a major business cycle, any rate of change in profits and losses that we may properly call normal. In spite of the interdependence of all classes of enterprise and all geographical units, alternating periods of activity and depression do not have the same effect on profits in any two industries, or in any two countries, or in any two sections of the same country. All this is equally true, whether we consider dollar income, or income corrected for changes in the purchasing power of the dollar.

Profits, in short, are highly fortuitous. They rise and

fall quickly and far in response to innumerable adventitious and unpredictable influences that never affect, in precisely the same degree, the supply of or the demand for any two commodities or any two services. Unlike population and production, profits do not show a normal rate of growth. Unlike rates of interest, rates of profit do not reveal a central tendency around which the variates cluster closely. In so far as the attitude of Congress and of the public toward business enterprises is dependent on a belief that there is a rate which the profits of individual enterprises tend to approximate, in a given year, or a rate of profit which tends to prevail, year after year, in business as a whole, that attitude is determined by an assumption which is contrary to fact. There is no such thing as 'normal' short-run profits, in any useful sense of the word.

CHAPTER XIII

DIVIDENDS AND SURPLUS VARY WIDELY FROM YEAR TO YEAR

CORPORATIONS follow no common policy with respect to the proportion of net book profits which they turn over to stockholders. In 1922, as Figure 24 shows, the only large dividend-paying group was the one that disbursed as

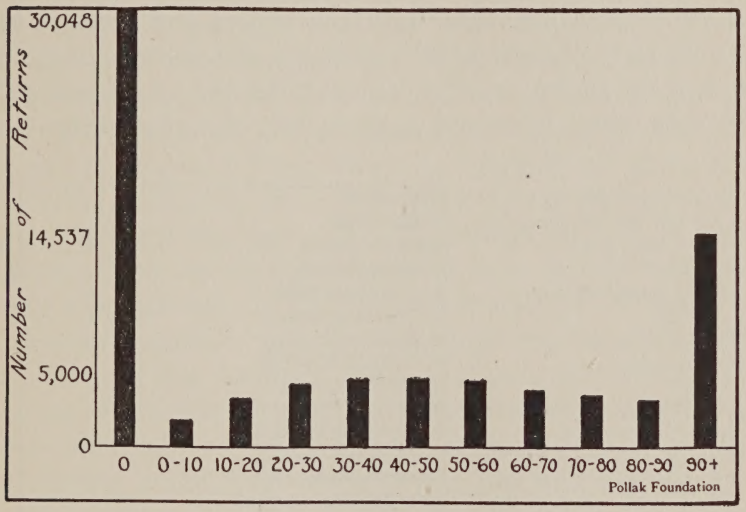


FIGURE 24. PROPORTION OF NET BOOK PROFITS OF UNITED STATES CORPORATIONS PAID AS CASH DIVIDENDS IN 1922

(From Senate Document Number 85, 68th Congress, First Session, *Distributed and Undistributed Profits of Corporations*. Chart includes all corporations reporting both net taxable income and net book profit by the year)

dividends 90 per cent or more of profits. For that year more than one fourth of the corporations belonged to this group; and this group paid about 40 per cent of all the dividends. Fewer than 4 per cent of the corporations

that paid dividends paid less than 10 per cent of their profits; and they paid only about one half of one per cent of the total dividends of the year. The rest of the corporations, as a glance at Figure 24 will show, were rather evenly distributed all the way from the 3357 concerns that paid 10–20 per cent, to the 3211 that paid 80–90 per cent. (See Table 14, Appendix.)

This even distribution of individual cases suggests the possibility that various industrial groups, considered as wholes, distribute as dividends about half their earnings. This is exactly what happens. For, if we divide these same corporations into industrial groups and note, as in Table 15 (Appendix) and Figure 25, the practice of each group, we find a marked central tendency. All together, in 1922, they disbursed as dividends almost exactly one

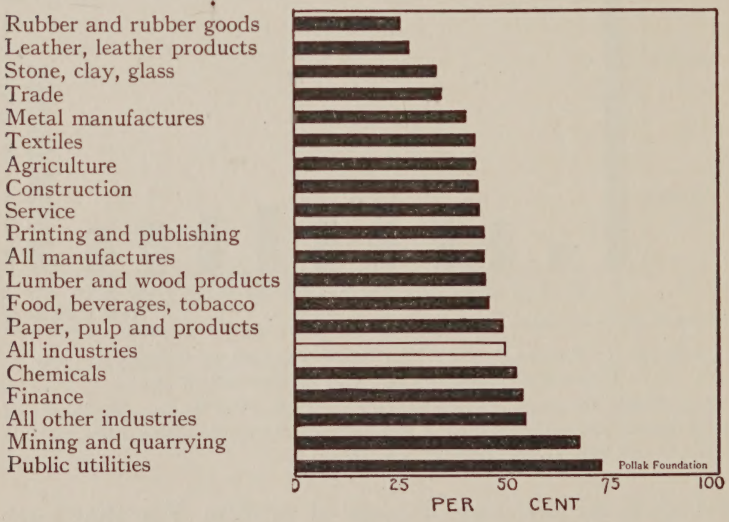


FIGURE 25. PROPORTION OF NET BOOK PROFITS DISBURSED AS CASH DIVIDENDS BY VARIOUS INDUSTRIAL CORPORATIONS IN THE UNITED STATES IN 1922

(Source: same as that of Figure 24. See Table 15, Appendix)

half their net book profits; and of the nineteen industrial groups there were thirteen each of which disbursed between 40 and 60 per cent of its profits. Corporations that are concerned with laundries, medicine, coal-mining, meat-packing, petroleum, hotels, chemicals, and the law do not seem to have much in common; yet in 1922 each of these groups came within three per cent of declaring as dividends exactly one half its profits. In a field in which there is such wide diversity, in which it is so difficult to find anything that appears 'normal,' the close approximation of so many industrial groups to the average 50 per cent disbursement of profits is noticeable.

All these facts concerning dividends are found in a report on corporation finances prepared by the Secretary of the Treasury. The substance of this report is summarized in the tables. Table 14 (Appendix) gives the income, dividends, and surplus of all corporations which reported, for the year 1922, net taxable income of over $2000. The net taxable income of these 79,625 concerns was 5389 million; the cash dividends paid during the year were 2781 million; and the aggregate surplus at the end of the year was 19,286 million. The table also shows how many of the reporting corporations disbursed as dividends less than 10 per cent of their net book profits, how many disbursed 10 to 20 per cent, and so forth. Table 15 (Appendix). gives net book profits and cash dividends by industrial groups.

Dividend Rates vary widely from Year to Year

Although it is a common policy to pay dividends in bad years out of surplus accumulated during good years, yet some industries make large increases and decreases in the dividend rate. In the third quarter of 1920, the average rate paid by industrials in England on ordinary capital

was 14.2 per cent; but, by the last quarter of 1921, the rate had been reduced nearly one half. (See Table 16, Appendix.) In England, during the year ending June 30, 1923, there was an increase of over 100 per cent in the dividend rate on the common stock of tea companies, and a decrease of 31 per cent in the rate on the common stock of iron, coal, and steel companies.

In contrast, the dividend rates of national banks in the United States, taken as a whole, are remarkably stable. From 1914 to 1923, through boom and depression, the per cent of dividends to capital and surplus, as Table 8 (Appendix) shows, did not rise above 7.63 or fall below 6.33. The Federal Reserve Banks under the law may not pay dividends at a higher rate than 6 per cent. The

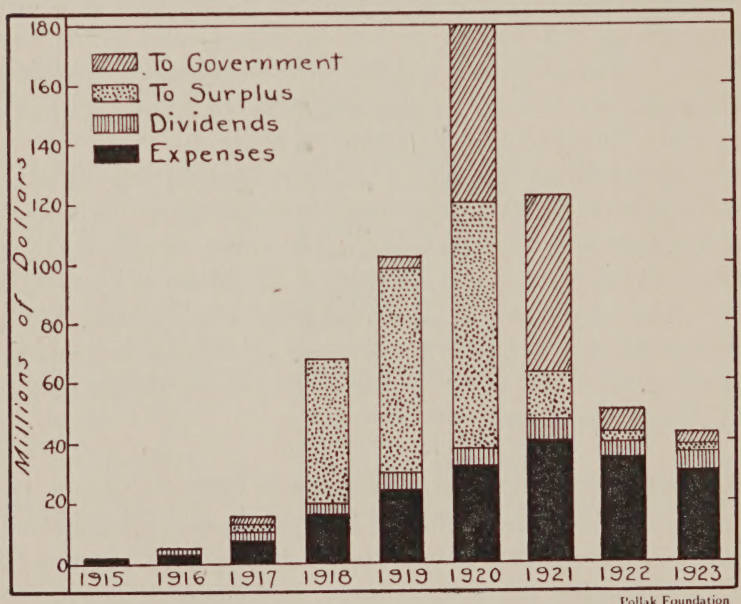


FIGURE 26. DISPOSITION OF GROSS EARNINGS OF FEDERAL RESERVE BANKS, IN MILLIONS OF DOLLARS, 1915–23
(From the Federal Reserve Board)

disposition of their gross earnings, 1915–23, is shown in Figure 26. This is essentially a picture of war and unstable money. Whether the record for 1922–24 is the beginning of what will prove to be the ordinary condition of the Federal Reserve Banks in time of peace, it is now too early to tell.

The Proportion of the National Income that goes to Surplus varies widely

It follows that the proportion of the total national income that goes to corporate surplus is far from steady. According to an estimate made by the National Bureau of Economic Research, summarized in Tables 17 and 18 (Appendix), corporate surplus received only 1.5 per cent of the national income in 1914, but 8.5 per cent two years later. This increase is more than offset by the decrease of from 56.3 per cent to 47.0 per cent in the proportion of the national income received by persons, other than farmers, with incomes below $2000. Nine per cent less of the national income went to wage-earners and others with small incomes; seven per cent more went to corporate surplus. Such fluctuations in the relative amounts going to surplus and to persons with small incomes evidently have some bearing on the problem, to be discussed in Part V, of maintaining a flow of money into consumers' pockets sufficient to take away all the goods that flow into consumers' markets.

Net Additions to Corporate Surplus vary widely from Year to Year

Additions to corporate surplus of 141 industrial corporations in the United States, as reported by the *Wall Street Journal*, show variations from year to year of hundreds of millions of dollars. These additions from 1915 to 1922 were as follows:

1915	$350,374,903
1916	893,119,741
1917	656,687,055
1918	422,765,977
1919	462,475,857
1920	379,049,620
1921 (Loss)	379,460,035
1922	284,418,827
Total	$3,069,431,945

It is interesting to note that the 379 millions added to surplus in 1920 were lost to surplus in 1921.

During this period there were wide variations in the additions to surplus made by mining, manufacturing, railroad, and public utility corporations. According to David Friday's estimate, only 4.9 per cent of the value

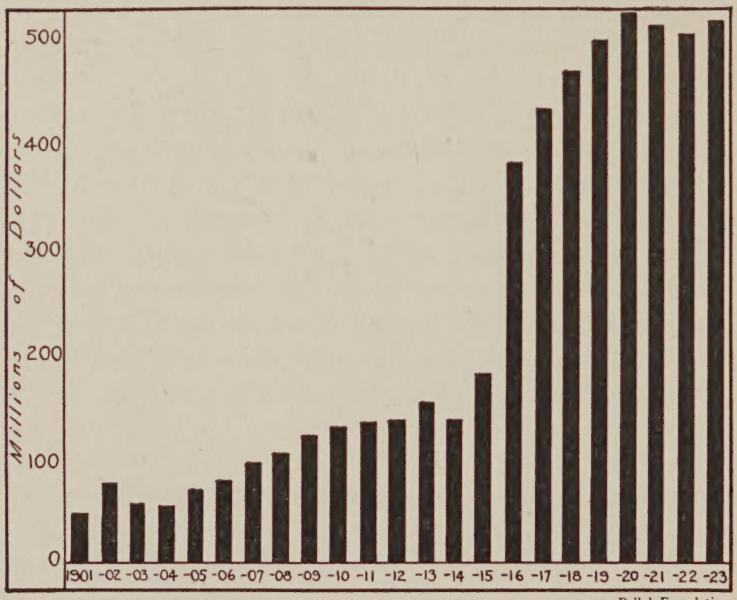


FIGURE 27. BALANCE OF UNDIVIDED SURPLUS OF THE UNITED STATES STEEL CORPORATION, 1901–23

(From the *Twenty-Second Annual Report* of the Corporation, 1923)

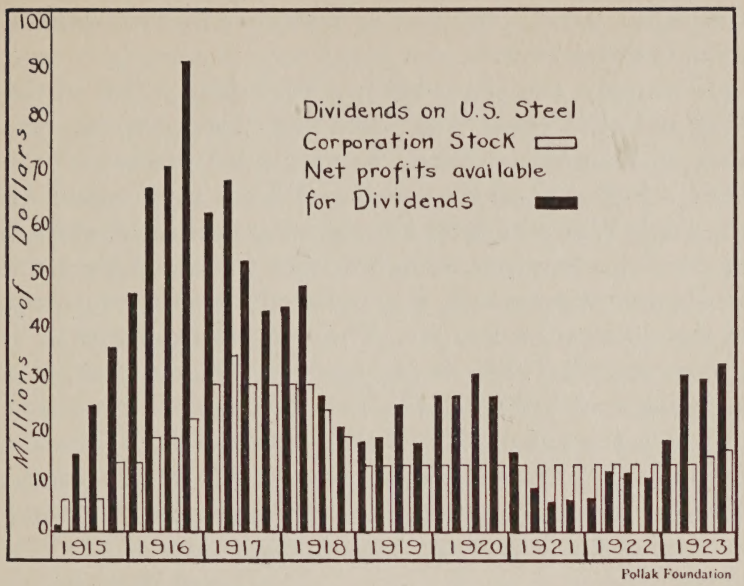


FIGURE 28. NET QUARTERLY PROFITS OF THE UNITED STATES STEEL CORPORATION AVAILABLE FOR DIVIDENDS, 1915–23
(From the Annual Reports of the Corporation)

added by these concerns went to surplus in 1913, but 19.1 per cent in 1916. By 1919 there was a return to about the proportion of 1913. The additions to surplus of public utility corporations in the United States increased substantially up to 1916, and fell off sharply thereafter. Dividends, however, were maintained. From 1916 to 1919, while the net income of 24 public utility corporations fell from 124 millions to 92 millions, the amount disbursed as dividends remained about the same.[1]

Table 19 (Appendix) shows that industrials in England during 1922, far from being able to add to reserves, were obliged to draw on their reserves for three and a half million pounds, with which to pay dividends. In 1923, on

the other hand, they added over twenty-four million pounds to reserves.

If we omit the years 1914 to 1921 (the period of the War and of the post-War boom and depression), we find that the annual additions to undivided surplus of the United States Steel Corporation did not vary much. In the single War year 1916, however, the addition to surplus of over two hundred million dollars was more than the total amount previously accumulated since the beginning of the corporation in 1901. These facts are presented in Figure 27 and Table 10 (Appendix). They appear, in a different way, in Figure 28. This figure shows the extent to which the net profits available for dividends, quarter by quarter, 1915–23, were distributed to the stockholders. It will be observed that the stockholders have not yet received a large share of the profits of the War years.

These Variations in Surplus may have Serious Effects

From estimates of the surplus that is reinvested by corporations, it appears that more than twice as much money was thus reinvested in 1915 as in 1914, and about twice as much money in 1916 and in 1917 as in 1918. (Table 20, Appendix.) Additions to corporate surplus fell from about two billion dollars in 1919 to about one billion in 1920.

It is true that such wide fluctuations are hardly conceivable apart from wide fluctuations in the purchasing power of money. During the four pre-War years, 1910–13, when money was relatively stable in value, the range in the proportion of the national income that was set aside as surplus was confined between 2.78 per cent and 3.86 per cent. However, fluctuations which seem small when stated in this way involve large sums of money.

Between 1913 and 1914, the amount going to corporate surplus appears to have fallen from about one billion dollars to half a billion. These fluctuations in the earnings that are ploughed back into the business, involving as they sometimes do billions of dollars, may well have far-reaching effects. The question is at least worth considering whether these vast changes in the amount of money that corporations receive from consumers, and use to increase their capital equipment, are causally connected with the periodic deficiency of money spent in consumers' markets. A change of even half a billion dollars may have a serious effect on the relation between consumers' income and consumers' goods, and consequently an important bearing on the economic problem with which we began our discussion. But that is one of the important inquiries that we must leave until our concluding chapters.

CHAPTER XIV

RELATIVE INCOMES OF LABOR AND CAPITAL VARY WIDELY

THE relative shares of labor and capital in the products of industry sometimes vary widely from year to year. During the upward swing of business that culminated early in 1920, the increase in the share of labor in the products of some of the larger organized industries, according to David Friday's estimate,[1] was more than the total average share of the national income that is received as dividends. Of the total 'value added' by mining, manufacturing, railroad, and public utility corporations in the United States in 1916, it appears that 39.4 per cent went to interest, dividends, and surplus, and 56.6 per cent went to wages; but by 1919 the share of labor had risen above 70 per cent, and the share of capital had fallen below 21 per cent. That is to say, labor received about 13 per cent more and capital about 18 per cent less of the value of the products of these industries in 1919 than in 1916. Dividends fell from 18.5 per cent of the total 'value added' in 1913, to 11.1 per cent in 1919. All these fluctuations are shown in Table 21 (Appendix). The outstanding feature of this table is the extent to which labor and the State increased their shares in the products of these industries from 1913 to 1919.

The Ratio of Dividends to Total Personal Income varies widely

Data for later years and for industry as a whole are found in the reports of the Treasury Department on *Statistics of Income*. From these reports, summarized in Table 22, it appears that, during the five years, 1918–22,

TABLE 22. PERSONAL INCOME FROM SERVICE AND FROM PROPERTY IN THE UNITED STATES[a]

SOURCE OF INCOME	PER CENT OF TOTAL INCOME					AVERAGE
	1918	1919	1920	1921	1922	
Personal service:						
Salaries, wages, etc....	47	47.93	57.21	59.21	55.06	53.28
Business, trade, farming, etc.....	26	29.90	22.21	17.88	21.14	23.43
Total from personal service.....	73	77.83	79.42	77.09	76.20	76.71
Property:						
Rents and royalties...	5	4.54	3.92	5.05	4.92	4.68
Interest on bonds, etc.	8	6.69	6.41	7.25	10.72	7.82
Dividends.....	14	10.94	10.25	10.61	8.16	10.79
Total from property	27	22.17	20.58	22.91	23.80	23.29
Total income.....	100	100.00	100.00	100.00	100.00	100.00

[a] *Statistics of Income;* annual reports of the Treasury Department.

the average personal income from dividends was 10.7 per cent of the total personal income from all sources reported by income-tax payers. Income from salaries and wages averaged 53.2 per cent; from business, trade and farming, 23.4 per cent; from rents and royalties, 4.6 per cent; and from interest, 7.8 per cent. The striking fact in this table is that income from dividends was 14 per cent of the total in 1918, but did not reach as high as 11 per cent in any subsequent year. Meantime, income from salaries and wages increased from 47 per cent of the total personal income to 59.2 per cent. It would astonish many people to find that such a large percentage of the income of the relatively well-to-do is from wages and salaries. It would cause still greater astonishment to find that the percentage of income from wages and salaries is high even in the upper income classes.[2]

Since 1918 dividends have been a fairly constant proportion of the income of those who pay personal Federal income taxes. Dividends for the calendar year 1919

were 10.9 per cent of the total income; for 1920, 10.2 per cent; for 1921, 10.6 per cent; and for 1922, 10.7 per cent.

Figure 29 gives the distribution of personal income by sources for the year 1921.

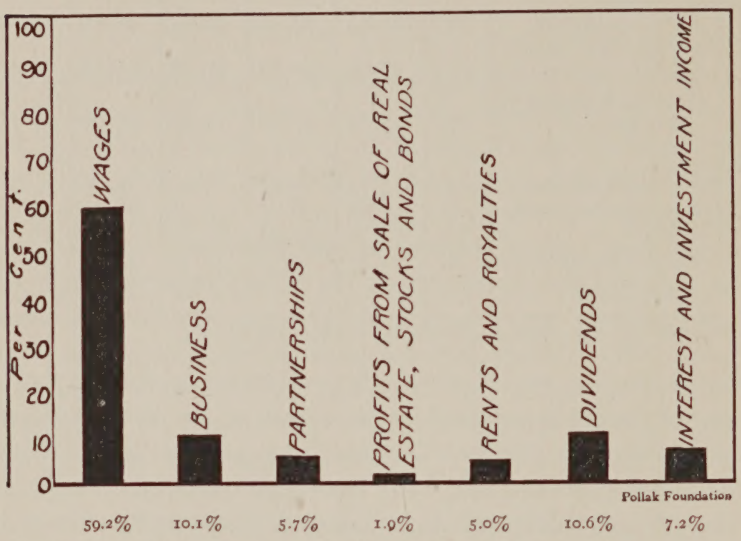


FIG. 29. PERSONAL INCOME, BY SOURCES, IN THE UNITED STATES IN 1921
(From *Statistics of Income* for 1921, Report of the Treasury Department; p. 8)

Variations in the shares of wage-earners in the net value product of industry are further shown in Table 23. It appears from this estimate of the National Bureau of Economic Research that the proportion received as wages and salaries increased from 68.7 per cent in 1909 to 77.3 per cent in 1918. This increase, however, was not constant. In each of three years — 1912, 1915, and 1916 — a smaller share of the product of industry went to labor, and a larger share to management and property, than in the preceding year. During the years 1909–17, the average return to management and property was nearly 30 per cent of the product of industry. Since then the aver-

TABLE 23. DIVISION OF COMBINED NET VALUE PRODUCT OF MINES, FACTORIES, AND LAND TRANSPORTATION BETWEEN EARNINGS OF EMPLOYEES AND RETURNS FOR MANAGEMENT AND THE USE OF PROPERTY[a]

YEAR	MILLIONS OF DOLLARS		PER CENT	
	Wages and salaries	Management and property	Wages and salaries	Management and property
1909	$6,481	$2950	68.7	31.3
1910	7,156	3250	68.8	31.2
1911	7,287	2791	72.3	27.7
1912	7,993	3169	71.6	28.4
1913	8,651	3359	72.0	28.0
1914	7,947	2316	73.8	26.2
1915	8,722	3470	71.5	28.5
1916	11,630	5810	66.7	33.3
1917	14,375	6502	68.9	31.1
1918	17,472	5124	77.3	22.7

NOTE: 'Wages and salaries' includes all pensions, compensation for accidents, and the like. 'Management and property' includes rentals, royalties, interest, and dividends. 'Net value product' does not include raw materials, supplies, and services received from other industries.

[a] National Bureau of Economic Research, *Income in the United States*, New York, 1921; vol. 1, p. 97.

age has been much lower. All these facts have an important bearing on the crucial problem, to which we have already alluded, of maintaining the flow of purchasing power to consumers in right relation to the flow of goods into consumers' markets.

Incomes of Labor and Capital are alike Insecure

Against the existing order the charge is often brought that property rights are secure while the rights of wage-earners are insecure. 'Property rights,' says Scott Nearing, 'have been so construed as to give property owners a first claim on production and to make property income a fixed charge on the industry of the community. This priority of claim has played a leading part in raising property to a position of supremacy in the economic world. The risks of industry, the burdens of economic uncer-

tainty, and the losses incident to the dislocations by the industrial system are carried in the first instance by labor. . . . The priority of property income goes hand in hand with its superior stability.'[3]

As far as profits and dividends are concerned, this contention is contrary to fact. The risks and the losses due to the uncertainties of economic enterprise fall first upon capital. Wages not only have priority of claim, but they are actually paid, as a rule, before it is possible to tell whether there will be any profits. At the end of each year, more than 100,000 corporations, having paid wages throughout the year, find that there is nothing left for dividends. During the years 1922–24, various leather companies, for example, kept on doing their part to provide shoes for millions of people, paying wages regularly, while giving the stockholders no other return on their investments than the satisfaction of meeting a universal need. At the same time other companies continued making hosiery — reducing wastes, increasing their efficiency, trying harder than ever before to provide people with what they wanted at the lowest possible prices — with the result that every worker received his wages every week while no stockholder received anything. The financial burdens of depression, as recent statistics clearly show, fall much more heavily on stockholders and farmers than on wage-earners.

For many years various railroads, built from the savings of many thousands of stockholders, have paid every dollar of wages, at rates fixed by law, without paying one dollar of dividends. From 1913 to 1925 the New York, New Haven, and Hartford Railroad, for example, carried millions of people and the necessities of life to millions more. Had this road suspended operations for a single week, the industrial life of New England would have been

seriously affected, and the whole country would have felt the loss. Yet, throughout this eleven-year period, the owners of the road did not receive a single dollar of dividends. Thus, at all times, some of the activities which from the standpoint of society are most beneficial are carried on, at extremely low social costs, by concerns that are struggling to get their balances out of the red. Capital often works without income; laborers rarely work without wages.

There are times, it is true, when large numbers of workers are laid off by concerns, some of which continue to pay rent, interest, and dividends; and this involuntary unemployment is a grave and valid charge against the established money and profit economy. But capital also suffers losses from involuntary unemployment. To ascribe these periodic depressions to the security of property income and the relative insecurity of service income is to ignore the facts. Those who seek to help matters by increasing the risks of investors are only making matters worse. A better social order requires greater stability and permanence of the incomes of labor and capital alike.

Income from doing and Income from owning

Various attempts have been made to divide all consumers' income into two distinct parts: pay for service rendered, and return on property owned. The usual purpose of this classification, needless to say, is to disparage property owners. Carlyle denounced the idle rich for appropriating one third of the wealth created by the toiling poor. 'The widow,' he says, 'is gathering nettles for her children's dinner: a perfumed seigneur, delicately lounging in the *Œil de bœuf*, has an alchemy whereby he will extract from her the third nettle, and name it Rent and Law.' This distinction between income from doing

and income from owning, the Webbs have made the core of their indictment of capitalist civilization. 'There is normally a surplus,' they declare, 'accruing to the class of legal owners of the instruments of production, merely as a consequence of this ownership, irrespective of whether or not they are the organizers or directors, or are otherwise coöperating in production in any way whatsoever.' This surplus, they maintain, now amounts to even more than one nettle out of the widow's three. They speak of the glaring inequality in the United Kingdom, before the War, in the distribution of the national income between doers and owners. Even in the United States, they say, with its boundless resources, the total income was so divided, in 1890, that 40 per cent was received as the reward of owning and only 60 per cent as the reward of doing.[4]

Our recent studies of national income, however, which are more dependable than earlier estimates, do not justify the conclusion that 40 per cent, or even 33⅓ per cent, of consumers' incomes in the United States is derived solely from ownership of property. From 1909 to 1918, the combined share of management and capital in the net product of highly organized industries was only 23 to 33 per cent. Not all of this share, it will be observed, was the reward of owning. That part which was distributed as wages of management is the reward of doing, and is not included as profits in our use of the term.[5] So much for the highly organized industries. This accounts, however, for not more than one third of the total income of management and capital. The rest is derived from agriculture, trade, professions, and numerous other occupations, in which it is impossible to say how much of the income is due to property and how much to labor, since most of the owners are also workers. It is certain, how-

ever, that a larger share of this two thirds of the income of management and capital is received for services rendered than of the one third of the income that is derived from highly organized industries. Moreover, our income tax returns for the years 1918–21 indicate that nearly 77 per cent of the reported income was for personal service and only about 23 per cent was return on property; and it is certain that a larger proportion of income on property is reported than of income from personal service. On the whole, therefore, it seems probable that of the total income of the United States, reported and not reported, not more than 20 per cent is the reward of mere owning and fully 80 per cent is the reward of doing.[6]

Our immediate interest, however, is in that part of the reward for owning that is paid out of profits. All personal income that is derived from owning is received mainly in the form of rents and royalties, interest and dividends. From the *Statistics of Income*, published annually by the Treasury Department (see Table 22), it appears that, during the years 1918–21, dividends accounted for about eleven per cent of the total personal incomes. Rents and royalties accounted for about four per cent, and interest for about seven per cent. That is to say, a little more than half the personal income that was derived from owning, and reported as such to the Government, was paid by corporations out of profits.

We have made a distinction between the income received by an individual on property he owns and the income he receives for services he renders. The dividends he receives from corporations to the success of which he has contributed nothing, or nothing but money, are clearly, as far as he is concerned, rewards for 'mere owning.' If, however, he holds stock in a concern of which he is a responsible director, or head of department, the

dividends he receives on this stock are sometimes in large measure, always in an unascertainable measure, due to his own services and cannot properly be called rewards of mere owning. This is true also of the dividends received by any wage-earner on stock of the corporation for which he works. It is equally true of all the profit-shares of employees. The workers in the Endicott-Johnson shoe shops, for example, receive, in addition to the regular dividends on such shares as they own, one half the profits that remain after provision has been made for dividends at the usual rates on the preferred and common stock. Any one can see that these dividends and these profit-shares are not the rewards of 'mere owning.' On the contrary, they are due chiefly to the good work of those who receive them. And such disbursements are increasing. As the shares of various enterprises become more widely distributed among the workers in those enterprises, and as the practice of profit-sharing grows, an increasing proportion of what we call income on property, and what is usually indiscriminately lumped as 'reward for mere owning,' is in fact reward for doing. This is another reason why we believe that the proportion of the national income that is solely a return on property owned is not above twenty per cent.

We have been speaking of the rewards of 'mere owning.' That expression may be accurate, as far as a given individual in a given period of time is concerned. Sometimes the landlord does nothing but collect rent, the bondholder does nothing but clip coupons, and the stockholder does nothing but endorse dividend checks. During the period in question, he renders no service whatever. It may be that at no time has he, himself, rendered any service. His income may be due entirely to the labor of others. All this may be true. If, however, we drop the

matter here, we leave an unwarranted implication hanging to the phrase 'reward for mere owning.' In our day, unless we entirely ignore the labors of past generations, it is rather difficult to find any income that is not attributable to the work of somebody. All present rewards for mere owning are in fact based on past rewards for doing. If we overlook that fact, we miss the economic meaning of thrift and inheritance. The growth of civilization has been due in large measure to the practice of passing on the rewards for doing in one generation to those who become owners in succeeding generations. How much individuals should be allowed to pass on to other individuals, and how much should be appropriated by the State, is a debatable question; but there is no doubt about the fact that there would be very little income from mere owning to-day, either for society or for individuals, unless somebody, sometime in the past, had received and *saved* income for services he rendered.

These facts blunt the edge of the frequently quoted observation of J. M. Keynes concerning the share of wage-earners in the products of industry. The capitalistic system, he says, 'depended for its growth on a double bluff or deception. On the one hand the laboring classes accepted from ignorance or powerlessness, or were compelled, persuaded, or cajoled by custom, convention, authority, and the well-established order of Society into accepting, a situation in which they could call their own very little of the cake that they and Nature and the capitalists were coöperating to produce. And on the other hand the capitalist classes were allowed to call the best part of the cake theirs and were theoretically free to consume it, on the tacit underlying condition that they consumed very little of it in practice.' [7] Picturesque as this statement is, it is statistically misleading. A share

of four fifths, or even two thirds, can hardly be called very little of the cake.

Profits from doing and Profits from owning

So far we have considered income from the standpoint of the individual who receives it. We have distinguished between the income derived by individuals from the services they render and the income derived from the property they own; between what is commonly called 'earned income' and what is commonly called 'unearned income.' We have urged the importance, in the interests of social progress, of bearing in mind that a large proportion of what is called unearned income of individuals has been earned by somebody. It is a return, in the present, on income earned and saved in the past.

Coming now to that part of the national income which we call profits, we may well turn from the standpoint of individuals to that of corporations. In its bearing on public welfare and public policy, what the corporations do that make the profits is more important than what the stockholders do who receive the dividends. There are profits from doing and profits from owning. When a corporation generates electric power, or grows bananas, or spins cotton, or transports lumber, or operates theaters, the profits that are realized as a result of those activities are rewards for service rendered. But when a corporation acquires coal lands, or corner lots, or patent rights, or franchises, or water power, and does nothing whatever but hold the property until it can be sold at a higher price, the resultant profits are rewards for the risks incurred merely in owning the property. In one case, the corporation has done something which increases the national wealth. In the other case, the corporation may have contributed nothing; the national wealth may

remain precisely what it would have been if the land and rights had remained in other hands.

This is not the place to discuss the significance of this distinction between profits from doing and profits from owning. We shall stop here only to remark that the 212,535 corporations in the United States that reported net income for the year 1922 derived their income from so many different activities that it would take a large volume merely to tabulate them. There were cotton speculators, building wreckers, pawnbrokers, naval architects, diamond cutters, gold-miners, fake stock promoters, summer-camp proprietors, rum-runners, jitney-drivers, truck-farmers, and thousands of others. In many cases, it would be difficult to determine how much of the profits came from doing and how much from owning. In any event, the effect on the public welfare of these multifarious activities must be so varied and so difficult to measure and appraise that no careful thinker would ever seek to justify or condemn them all in one sweeping generalization.

SUMMARY OF PART III

We may now summarize the main conclusions to which we are led by the available statistics.

Business losses are vast. In the United States during the year 1921, the losses of all the reporting corporations amounted to nearly four billion dollars, an amount in excess of six per cent of the national income. Every year there are many thousands of corporations that make no profits at all, many thousands that do not receive enough money for their products and services to pay the year's expenses. In times of severe depression, such as the year 1921, more than half of all reporting concerns report no net income whatever. Even in periods of inflation, such

as the year 1917, more than one third of our incorporated concerns have only deficits to report. Even in prosperous years, there are several thousands of business failures.

These business losses can be reduced, but in a living society they cannot be eliminated; they are a part of the price we have to pay for progress. This is a problem, therefore, that must be reckoned with by any progressive society, no matter what the structure of its industrial organization may be. In a price and profit structure, we cannot arrive at an enlightened public policy toward successful profit-seekers while ignoring the problems of the unsuccessful. As long as consumers have freedom of choice, and private enterprises are free to compete for their patronage, and encouraged to do so by the prospect of profits, business must run risks and suffer losses. Somebody must pay these losses.

Among successful enterprises, there are wide variations in total net profits and in rates of profit. Not only do aggregate business profits fluctuate widely from quarter to quarter and from year to year, but also the profits of the various industries, and of different concerns in the same industry. We find, too, that in any given year some industries suffer while others prosper; some concerns in a given industry succeed while others fail; and certain branches of a given industry fare much better than others.

The average rate of profit for business as a whole is several times as high in years of prosperity as in years of depression. The rate on capital appears to have been nearly 25 per cent in 1917, but not much above 3 per cent in 1921. Variations in rates, however, both in good times and in bad, among the industries and among the individual concerns in each industry are so extreme, so diverse, so far from predictable, as to make 'average business

profits' a term of no practical use whatever; worse than that, a term that is constantly leading people to unwarranted conclusions.

In any one year a large number of corporations in the United States disburse as dividends more than 90 per cent of their net profits. A still larger number pay no dividends at all. Between these two extremes, the other corporations are rather evenly distributed. If, however, we consider these same corporations by industrial groups, we find a marked tendency toward uniform practice among the groups. Of the nineteen principal groups included in the reports of the Treasury Department for the year 1922, thirteen disbursed as dividends between 40 and 60 per cent of their profits. All together, they paid to stockholders almost exactly one half their net profits.

From year to year there are large increases and decreases in total dividend payments, in the rates paid by most industries, and, naturally, still wider variations in the dividend rates paid by individual companies.

The proportion of national income that goes to corporate surplus and the total additions to surplus also vary widely from year to year. The surplus of 141 industrial corporations showed a gain in 1920 and a loss in 1921 of about 379 million dollars. According to the best available estimate, corporate surplus received only 1.5 per cent of the national income in 1914, but two years later the proportion rose to 8.5 per cent. This meant that the total additions to surplus rose from about half a billion dollars in 1914 to nearly four billion in 1916. Even in less turbulent times, the variations are large. A change of only one and one half per cent in the share of the national income that goes to surplus means a change of not far from a billion dollars. Inasmuch as such changes carry with them vast changes in the volume of money that

flows into consumers' hands as wages, these fluctuations in surplus may have much to do with the problem of maintaining the flow of money into consumers' markets in right relation to the flow of goods.

The relative shares of labor and capital in the products of industry also vary widely from year to year. Labor appears to have received about 13 per cent more of the total and capital about 18 per cent less in 1919 than in 1916. In 1918, according to reports of the Treasury Department, income from dividends was about 14 per cent of the national income, but has not reached 11 per cent in any subsequent year. In the same period, income from wages and salaries rose from 47 per cent of the total personal income to 59.2 per cent. Variations in the shares of wage-earners in the net value product of industry are further shown by estimates of the National Bureau of Economic Research. From these estimates it appears that the proportions received as wages and salaries increased from 68.7 per cent in 1909 to 77.3 per cent in 1918. This increase, however, was not constant. In each of three years — 1912, 1915, and 1916 — a smaller share of the net value product went to labor, and a larger share to management and property, than in the preceding year.

From all these statistics, it is evident that, for any one year or for any series of four or five years, there is no 'normal' rate of profit, no 'normal' rate of dividends, no 'normal' share of stockholders in the products of industry. Nor is there, in the course of a major business cycle, any rate of change in profits and losses that we may properly call 'normal.' In spite of the interdependence of all classes of enterprise and all geographical units, alternating periods of activity and depression do not have the same effect on profits in any two industries, or in any two countries, or in any two sections of the same country.

In short, profits are highly fortuitous. They rise and fall quickly and far in response to innumerable adventitious and unpredictable influences that never affect, in precisely the same degree, the supply of or the demand for any two commodities or any two services. Unlike population and production, profits do not show a normal rate of growth. Unlike rates of interest, rates of profit do not reveal a central tendency around which the variates cluster closely. In so far as the attitude of Congress and of the public toward business enterprises is dependent on a belief that there is a rate which the profits of individual enterprises tend to approximate, in a given year, or a rate of profit which tends to prevail, year after year, in business as a whole, that attitude is determined by an assumption which is contrary to fact. There is no such thing as 'normal' short-run profits, in any useful sense of the word.

PART IV
THE FUNCTIONS OF PRICES AND PROFITS

CHAPTER XV

BUYERS DETERMINE PRICES

PROFITS are the heart of industrial life. From this fundamental idea, with which we began our discussion, we cannot stray far without losing our bearings. It is the admitted basis of fact upon which all intelligent criticism of the economic order, conservative or reactionary, must be founded. Whether for good or for evil, the mainspring of economic effort is the prospect of individual reward. The profit incentive is not merely one motive force among many that keep men at work creating wealth and thus determining standards of living, but the one force without which the others can scarcely function at all.

The industrial system, however, that is driven by this force is usually indicted on four counts: the penury of the workers; the relative luxury of the proprietary class; the dependence of wage-earners on those who own the instruments of production; and the unsoundness of the system as a means of producing and distributing commodities and services. These are the charges preferred by Sidney Webb, a member of the British Labor Cabinet.[1] But discontent is not confined to those who forecast the decay of capitalist civilization. Even Hartley Withers, author of *The Case for Capitalism*, declares that, as a result of our haphazard economic system, a large part of mankind is underfed, ill-clad, and ill-housed; while 'a large part of the rest wearies itself in consuming things that it does not really want and vying with itself in vulgar ostentation and waste.'[2] Indeed, nobody who faces the

facts can be complacent. Every one deplores the periodic spectacle of millions of unemployed men, abundant tools to work with and materials to work upon, nations in need of the goods that these men are eager to make with these idle machines out of these surplus materials, while no immediate means are found of bringing the men, machines, and materials into such relations that they can go on with the world's work. This involuntary unemployment is cause enough for the unanimous conviction that all is not well with industrial society.

But here the unanimity ends. To the question what can be done, the answers are legion. The answer of Lenin and Trotsky, offered with the dramatic setting of a revolution, is simple and sweeping: To cure the ills of capitalism, you must kill it, root and branch — production by private enterprise, distribution by the price system, wages, profits, money, everything. Here is a program that takes full account of the fourfold indictment. If this program does not make the poor richer, at least it makes the rich poorer; and if, in spite of its high purposes, it injures the instruments of production and the incentives to labor, until there is much less to distribute than formerly, at least it provides a radically different method of deciding who shall run such machines as there are, and who shall get whatever there is to distribute.

Most people, however, reject this program for a reason that is as simple and sweeping as the program itself, for they regard profit as the mainspring of industrial society; and all the eloquence of all the radical reformers has not convinced them that anything can entirely take its place. So they would not abolish profits. They would, however, gladly abolish the profiteer.

But before we abolish anybody, it behooves us to know just what he is doing and why. It is well for us to try to

see who makes prices and who makes profits, and how it happens; what is the economic function of price, and what is the economic function of profit; what gives rise to excessive profits; what profits and prices have to do with each other, and how they can be regulated; in fine, how things came to be what they are in this world that vexes us, and what the alternatives are. To know this is as important for the man who is pleased with all things, as it is for the man who is pleased with nothing. And it is an indispensable groundwork for constructive reform. If those who are eager to forestall what they regard as excessive profits would first take the trouble to find out how they arise, less time and effort would be wasted in futile methods of reform.

In any event, we must answer this question before we can proceed with our discussion of the relation of profits to human welfare. Let us ask, then, how it happens that some men make very large profits. Let us try to find out which among innumerable kinds of profit are harmful to society and which, if any, are beneficial. Let us inquire who the harmful profit-makers are and just how they do harm. If there are any beneficent profit-makers — men who in the process render service to society — it cannot help matters to denounce them along with everybody else. It can do nothing but harm to condemn profit-makers indiscriminately, or wage-earners, for that matter, or politicians, or any other group.

Accordingly, before we abolish the profiteer, we must find out who he is. If we were to ask the man in the street to tell us, or even the man in the market-place, he would probably say that the profiteer is any one who makes unreasonable profits. And if we pressed him for a more definite answer, he would tell us that any profits are unreasonable that are much larger than most men are realiz-

ing. That is the sense in which we shall use the term 'profiteer.'

If this is the man we want to abolish, how are we going to do it? We cannot go about the business sensibly until we know how this man came to be so successful a profit-maker; and we cannot make sure of that until we know what profits are, and how they are made. First of all, then, we must note the fact that profits (as pictured in Figure 1, page 31) are the difference between cost and selling price; that is to say, what remains of business income after all expenses have been met, including wages of labor and management, the going rate of interest on investment, and all other costs. It follows that, in order to do away with the profiteer, while retaining a profit economy, we must somehow manage to control either his costs or his selling prices. But we cannot control either costs or prices until we know how costs and prices are determined. These questions we shall not attempt to answer fully. Fortunately, the statement of a few general principles which in the main hold true — without mention of various exceptions that will occur to every one — is sufficient for our present purposes.

Usually Buyers determine Prices

Who, then, determines prices? Is it not the profiteer himself? Strictly speaking, it is not; it is the buyer who makes the price.

The *price-level* is determined by the sum total of individual purchases, and this sum total is determined by conditions with which individual buyers have very little to do; but on a given price-level the *relative prices* at which various commodities and services are sold are determined almost exclusively by the purchases of individual buyers.

According to the usual view, prices tend toward the level at which the quantity demanded is equal to the quantity supplied. (See page 35.) 'Value,' says John Stuart Mill, 'always adjusts itself in such a manner that the demand is equal to the supply.' Accordingly, in current economic teaching, the prices for which goods are sold in a competitive market are said to be 'the outcome or resultant of the individual valuations of all who buy and sell in the market.' In other words, each individual trader is said to have 'a part in that collective supply and demand which makes the price whatever it happens to be.' [3]

This statement is true in a general way; but one of the conclusions usually drawn from it is not true. Since prices are the resultant of supply and demand, it is said, buyers cannot possibly have any more influence over prices than sellers. This conclusion takes no account of a crucial difference between the position of the buyer and that of the seller. To discover this difference we must keep in mind the fact that the price of any commodity on any day is determined on that day in the very process of making sales. Now on that day the supply of each commodity that may be sold is virtually fixed and cannot be greatly changed.[4] Consequently the *relative* supplies of all the commodities are fixed. On that day, however, the demand for any commodity can be changed instantaneously by the action of buyers. Consequently, the demand for each commodity in relation to the demand for other commodities can be changed. Thus buyers hold nearly all the options. The valuation placed on any commodity by the seller has comparatively little to do with the price at which it is sold. As a rule, he is obliged to sell whatever he has to sell for whatever buyers decide to pay, whereas the buyer is free to buy a substitute or, in many cases,

not to buy at all.[5] Thus, by determining every day the relative demand for fixed supplies of various commodities, buyers determine prices.

But, it is said, the supply, which is one of the factors in determining the price, is determined by producers. This statement is also true in a general way, as far as it goes; but the dominance of the buyer in determining prices is not made clear until we go one step further, and take account of the fact that producers necessarily adjust supply as accurately as possible to the actual and expected demand of the buyer. Thus, whether we look at the market from the supply side or the demand side, we find that the buyer is the dominant factor in determining prices.

But, it is said further, human beings are obliged to buy some things; they cannot live like the beasts of the field. Even so, the rule holds. No matter how necessary or how unnecessary a given commodity may be, no matter whether it is bread or beads, the price is made by those consumers who have money to spend and who spend it for that commodity instead of for some other commodity. The fact that there are widows who have no money to buy milk for their sick babies, while there are many mothers who could and would buy it at a hundred times the price, is evidence of an unfortunate distribution of wealth; but even with a more equitable distribution of wealth, buyers would still determine the price of milk.

Cases of monopoly, it is true, may call for measures of public control that are unnecessary for typical competitive enterprises — measures that we shall not consider here. But even a monopoly — in gas, anthracite coal, sulphur, aluminum, or any other commodity — usually has to meet the competition of substitutes and, in any event, can sell a given output at no higher price than buyers decide to pay.

As an instance of what happens under open market and highly competitive trading, we may consider the part the buyer plays in making the price of pig-iron. Let us suppose the asking price to be seventeen dollars a ton, with many foundries out, factories shut down, and virtually nobody buying. Under these conditions, the price is merely nominal. Presently A finds a buyer at sixteen dollars and decides to accept his offer; but as B thinks that there will soon be buyers at a higher price, he declines to sell at sixteen dollars. So at that price, A gets nearly all the orders there are. After a while, however, buyers cannot get all the pig-iron they want from A; so they take part of what they need from B at the higher price. Then B puts his offering price up to eighteen dollars. Buyers naturally take all they can get elsewhere at lower prices, and then order from B, at eighteen dollars, only as much of their requirements as they cannot buy at a lower price. As soon as B thinks that buyers are ready to pay more, he advances the asking price to nineteen dollars, and so on. During this process, as some buyers put the price up, other buyers drop out. Some of them have to drop out. Some makers of stoves, for example, when the price of pig-iron has reached a certain height, cannot make stoves and sell them at a profit. Therefore, they stay out of the pig-iron market. As the asking price goes higher still, other buyers decide to wait, until the time comes when, say at twenty-eight dollars, there are no buyers at all. B, however, does not reduce the offering price. He is aware that, as long as there are no buyers, the price at which goods are *offered* has little significance. It is nothing but a seller's price; there is no real market. So he waits until there is a real buyer to fix the price. He finds one, let us say, at twenty-seven dollars, and makes a sale at that price. In this way, step by step, the price goes

down to, say, eighteen dollars, the price being determined at each step by what the buyer will pay rather than wait to see if he can buy at a lower price.

Failure to understand all this is due partly to the widespread belief that prices are made by the simple process of figuring costs and adding profits. That is, indeed, the way in which sellers would like to determine prices. But the prices at which goods are actually sold at any given time are not arrived at in this way; for the buyer cares little about either the costs or the profits of the seller. When a buyer offers twelve cents a pound for copper, it is useless for the miner to say, 'I cannot possibly produce it at that price.' The buyer is not interested in the troubles of the seller. If he buys at all, he buys at a price that suits him, regardless of the resultant profits or losses to the seller.

In the long run, it is true, prices tend to keep above production costs; for if the highest price that buyers will pay to-day is too low to yield a profit to the highest-cost producer, he is likely to go out of business, thus tending to reduce the supply and increase the price. But at any given time there is no necessary connection between costs and prices. Any one may arrive at an *offering* price in any way he chooses; but at no time is the *selling* price made by adding profits to costs. If selling prices were made in this way, most of what we said about the risks of business would have no point. The seller fixes merely the price at which goods are *offered;* the buyer fixes the price at which they are *sold*. No merchant ever suffers long under the delusion that he controls the price at which he can sell a given volume of goods. He soon finds that, in filling out his price tags, he must either guess right concerning the action of buyers, or guess again. His cash register lets him know when he guesses right.

All this may sound like nonsense to a man who has just bought a Ford car. He found the car already priced, and priced too high to suit him; but he had to pay the price or leave the car. Nevertheless, even Henry Ford is no exception to the rule. Millions of people, in deciding to buy or not to buy at a given price, tell Mr. Ford at what price he can dispose of his output. It is literally true that on every road in the country there is some driver who has had a part in fixing the price of Ford cars. In any department store to-day the prices of some things — radio sets, perhaps, and the latest novelty in scarfs — may seem high enough to yield large profits; and possibly they are. In any event, buyers have made the high prices; and in any event there is another side to the story. In the same store there are certain to be other things — books, perhaps, and mah-jong sets — which are priced below the cost of production. Again, they are priced as they are because buyers have so decreed. In another year, buyers may decide that radio sets and last year's scarfs must be sold at a loss.

Naturally, on any given day there are innumerable exceptions to general rules; economic forces do not produce their full effects instantaneously. Every day many commodities, including Ford cars, are sold in given quantities at prices lower than consumers would be willing to pay. In some cases this happens because the seller is committed to certain prices for a definite period of time. The largest mail-order houses, for example, cannot quickly adjust their prices to changes in demand, since it costs a million dollars or more to prepare and distribute a new price-list. In many more cases it happens because the seller misjudges the market. There are numerous other exceptions, but the rule still holds: the buyer is the dominant factor in determining prices.

Relative Costs, not Absolute Costs, determine Profits

It is the buyer and not the seller, then, who has the final word concerning prices. Even so, does not the individual seller have much to do with fixing *costs* and thus regulating profits? Not so much as one might think. As a rule, many manufacturers are competing for the same raw materials and the same workmen. Together, as buyers of commodities and of labor, they determine what prices and what wages are actually paid. The individual manufacturer, except in unusual cases and for short periods, must pay the prices and the wages thus determined, or stop producing. He has no range of choice comparable to that of the final consumer.

In any event, it is not *absolute* costs that have most to do with his profits. It is the relation of his costs to the costs of his competitors; and over the costs of his competitors he seldom has any control. In 1924, for example, three companies produced a certain machine, A at a lower cost than B, and B at a lower cost than C. As buyers cared nothing about production costs, but paid the same price to all three producers, A made a profit of twelve per cent, B made a profit of two per cent, and C suffered a loss of three per cent. Since it is *relative* costs that have most to do with profits, a producer may gain in efficiency and yet suffer losses, or he may lose in efficiency and yet realize profits. His own high profits may be due chiefly to the incompetence and consequent high costs of others.

To be sure, it is possible for him to reduce his own efficiency, in order to bring his profits down to the average; but this would hardly appeal to him, or to anybody else, as a service to society. It would not help consumers, for it would neither increase supplies nor decrease prices. Indeed, it usually has exactly the opposite effect. As in the case of automobiles, so in general, lower prices

result from mass production by the most competent enterpriser.

The point to remember — for we shall make use of it presently — is that for no two producers of the same article, cars or copper, cotton cloth or cabbages, is the cost of production by any chance exactly the same.

CHAPTER XVI

PRICES DETERMINE WHO GETS THE GOODS

It is the buyer, then, who determines the price. Of course the price is unsatisfactory. No price can be low enough to suit all buyers individually, as long as collectively they want more goods than the markets afford. This brings us to the most fundamental fact in our whole discussion: Whenever anything is sufficiently scarce and sufficiently desired to command a price, more than one man wants it. Competition ensues. This competition must continue as long as consumers have freedom of choice; and as long as this competition continues, there must be some means of determining who gets the goods.[1]

All the problems of economics arise because human beings have their own notions about what they want, and because there can never be enough of what they want to go around. Were it not for this inescapable combination of circumstances, human society as we know it could not exist. If there were a given number of units of goods and precisely the same number of buyers, each of whom would be satisfied with one unit, economics would have no difficulties and price would have no meaning. But the moment there are one hundred units of goods and one hundred and one human beings who want them, our economic troubles begin. And they are numerous, because few of the good things of life are as free as the air. Scarcity is the rule, and antagonism of human interests is the inevitable result.

This antagonism is too deep to be overcome by any economic or political program whatever. Socialists and communists do not overcome it; they merely overlook it.

They can indulge themselves in this oversight, however, only as long as they confine themselves to theory. As soon as they try an experiment, this antagonism of interests thrusts itself rudely into the middle of the scheme and gums up the whole works. The prevailing profit economy, on the other hand, does not blink the facts. Under it, consumers compete in price markets for limited supplies and prices determine who gets the goods.

Buyers compete with One Another for the Same Goods

We habitually think of competition as the rivalry of sellers. As a matter of fact, the rivalry of sellers is wholly conditioned by the competition of buyers. It is in the very process of competing with one another for available supplies that buyers make prices what they are. All markets are much like an auction sale: the successful bidder makes the price and takes away the goods.

This is illustrated daily in the Automatic Bargain Basement of a department store in Boston, in which customers are invited to make their own prices. They are assured that if they refuse to pay the price at which goods are offered, that price, after twelve selling days, will be reduced twenty-five per cent. If they hold out six days more, the price will be reduced fifty per cent; in another six days, seventy-five per cent; and six days later the goods will be given away. When this policy was adopted, many people predicted failure. Of course, they said, customers will wait a few days, in order to benefit by the automatic mark-downs. But these people were mistaken. They overlooked the fact that in the automatic basement, as in every other part of that store, and in every part of every other store, buyers compete with each other for the same goods. The individual buyer waits for a mark-down on the particular coat which has

taken her fancy only at the risk of having somebody else get the coat. As a rule, the buyer does not wait; about eighty-five per cent of the Automatic Basement stocks are sold at the first asking price.

Because of the failure of the buyer to understand the function of price and his part in the sale of goods and the determination of profits, he is constantly trying to place on somebody else the responsibility for the cost of living. That is to say — though he would not say it in this way — he would like to prevent others from buying what he wants to buy. He insists on the personal right to walk into the butcher shop and select his cut of beef, but he protests against the high price. He does not perceive that he, in competition with all other buyers of beef, has made the price of those selected cuts three times as high as the price of certain poorer cuts. Who is to get the better cuts? What price is to be paid? Here are two ways of asking the same question. Under the prevailing system of price bidding, the consumers themselves decide. Rarely is any other plan feasible.

Usually Distribution must be on the Basis of Price

In some fields, it is true, price bidding has been eliminated. If a man wants a telephone, he takes what is given him at the established price. No matter how exasperated he may be, he cannot get better service than his neighbor by bidding up the price for that class of service. If he rides on a New York subway, he pays five cents, takes any seat he can get or hangs to a strap, and goes where the train goes. If he burns gas, he burns what comes through the main; exactly what his neighbor burns and at the same price. He has no choice. But there are reasons why competition in such public services cannot be allowed, reasons that do not apply to the services of

dressmakers and mechanics. Unrestricted competition among utilities that must use the public highways would be too annoying, even if it were not too wasteful, to be tolerated.

For other reasons, bidding is not allowed for Harvard-Yale football tickets. They are arbitrarily allotted to the favored list at a fixed price; and those who receive them are not allowed to re-sell them at any price, on penalty of being black-listed and denied tickets in the future. The object of the black-list is to prevent speculation. If Harvard-Yale tickets were sold as most things are sold, all but about seventy thousand bidders would be eliminated; and the last to drop out would determine the prices. What the prices would be, nobody knows. Since bidding is not allowed to decide who gets the tickets, allotment has to be made on some other basis.

But automobiles, mah-jong sets, pig-iron, chamois skins, oil paintings, corn, and a hundred thousand other things for which buyers compete cannot be distributed to final consumers at fixed prices by the Harvard-Yale ticket plan. The Government could not prescribe prices for everything, maintain favored lists of buyers, declare all goods 'non-transferable,' and enforce the rule by means of a black-list for millions of people. In an attempt to carry out such a plan, even though the Government withdrew half our productive workers and drafted them as clerks and policemen, there would still be speculation in commodities and consequent large profits for somebody. There is no speculation in New York subway seats solely because there is no way of buying and re-selling them. First come, first served, is the rule; the traveler either gets a seat for five cents or does not get a seat at all. But it would be impossible to prevent the re-sale of most commodities. Buyers would still compete for them,

and those who bought them at the official fixed prices would sell them at higher prices — as much higher as the buyers would pay.

Even if the Government could regulate the first sale price of a given commodity, it could not regulate the re-sale price. Consequently, although the Government might prevent the original seller from making large profits, the profits would go to later sellers. If, for example, a low-cost producer of coal were obliged to sell at a price that would reduce his profits to the level of those of high-cost producers, consumers would not gain thereby. Those who bought the coal at the fixed price and sold it at the market price would be the gainers. And even if the Government, at great expense, could prevent the re-sale of coal, it could not exercise the same control over thousands of other commodities. This is evident from the futile attempts to prevent speculation in theater tickets; though in this case, since each ticket is easily identified, the difficulties are not so great as they would be in the case of coal, cotton, and many other commodities. Consequently, as a rule, distribution has to be on the basis of price bidding.

Prices are Right when they move Goods

Buyers compete with one another for the same goods. That is the gist of the matter. Price is the product of that competition. It is not a function of price to make profit for anybody: profit and loss are by-products. One of the functions of price is to move goods. Sometimes it moves them at a loss to the seller; sometimes, at a profit. When prices do not move goods, business suffers a depression; and it does not get over it until prices again fulfill their function. Then prices are right — economically right. There is a right humidity for making cloth, a right tem-

perature for baking bread, a right current for a given motor. In each case, the rightness can be proved by measurement, but not by personal opinion. Similarly, the extent to which prices function is a question of fact: they either do or they do not move goods. It is no use finding fault with them because they fail to do what they are not intended to do. For the purposes of pleasure-riding, there is something wrong with a steam roller; but there is nothing morally wrong. Prices are necessarily wrong for bringing relief to the destitute; but not morally wrong. Prices are economic, not charitable, institutions. The only crime prices can commit is to fail to move goods into consumption.

Sellers take as much as Buyers will pay

But is it not true that, under this system, profit-makers charge 'all that the traffic will bear'? Yes, as a rule. This, however, is merely to say again that they charge whatever consumers, competing for the same goods, allow them to charge; and there is no other way of determining who is to get the goods. But if this is what we mean by profiteering, who among us shall cast the first stone? We are all doing business daily in a society that is based on the expectation that every individual member will obtain whatever he can for whatever he has to sell. And he rarely disappoints us. Farmer, grocer, meat-packer, all our fellow workers in every career known to the census, including those who are loudest in their condemnation of profiteers, usually accept for the commodities they wish to sell as much as they can get. When any one declines to do so, his conduct is so exceptional that it catches the eye of the city editor and figures in the headlines.

All this applies as well to those who have services to

sell — lawyers, engineers, teachers, Congressmen, plumbers, and the rest. Once a maladjustment among the industries has occurred, as it did in 1920–22, it is useless to find fault with the workers in any one industry for taking as high wages as they can get, or to plead with them to accept reductions in the interest of the *general* economic situation. It would be just as sensible to plead with the stockholders of a corporation to accept reduced dividends merely because the stockholders of other corporations had been obliged to do so. Both wage-earners and stockholders, as a rule, will acquiesce in reductions only if they have to. 'There is a fair and right adjustment between the various groups and classes,' says a monthly bank letter. 'Every group and class is interested, not in grabbing all it can, but in finding the right adjustment. . . . The stubborn resistance which labor is making to reductions from the abnormal wage rates that were established during the War is a mistaken policy, from the standpoint of labor's own interests.'[2] It appears, on the contrary, that every group and class is actuated mainly by a desire to get as much as possible, and little can be gained in any one generation by trying to eradicate this fundamental human trait. It is probable that a better balance of the industries can be brought about by a better understanding, on the part of the managers of industry and finance, of the functioning of prices and profits; but it is doubtful if much can be achieved by blaming any group of wage-earners for conditions for which no one group is largely responsible, or by urging electricians, or plasterers, or farmers, or any other workers, to accept, for the good of society, less than they can obtain. And it is a mistake to tell the workers in any one industry that, because of the general situation, they will gain in the end by agreeing to wage reductions. This, as the workers know, is not

necessarily true. No one group of producers — cotton-mill operators, for example, or automobile mechanics, or coal miners — should be expected to accept wage reductions simply because somebody declares that such a sacrifice would help to bring about a balanced condition of industry. Each group obtains as high wages as possible; it does not consider itself responsible for general economic conditions. And it is not. As long as we have fluctuating price-levels and trade cycles, characterized by a flow of money into consumers' hands that is *more* than enough to buy the available goods at current prices, followed by a flow of money that is *less* than enough, we shall have marked fluctuations in the incomes of various groups of workers. And no one group will be responsible.

So with profit-seekers. It is easy to get the point of view of those who would like to abolish profits and all other material incentives to individual effort, even though it is impossible to see how such a scheme could work; but until we abolish private property and find a workable substitute for the profit incentive, it is not clear why we should condemn any one profit-seeker merely for doing in ordinary times what society, as a going concern, requires that virtually everybody must do. It is not clear, for example, on what grounds the *Dearborn Independent* indicts the New York landlord because he 'exacts all the rent which the traffic will bear,' when the owner of the paper, in pursuit of the same policy, appears to make larger profits than any other man.

To many business men, no doubt, as well as to many social reformers, all this taken by itself sounds crass and heartless. But any one who understands the functions of price and profit will see that this conception is consistent with the highest moral ideals. It is put bluntly as a shock to misguided social reformers. Much that they say about

profiteering is not only economic nonsense, but moral nonsense as well. In the interest of a more equitable distribution of wealth, a higher standard of life, and human welfare generally, it is important for us all to understand that certain economic laws are neither moral nor immoral; they are inexorable. To accept them as such is the first business of any one who would serve his fellow men.

There are Many Exceptions to Economic Rules

Here, perhaps, we should emphasize the fact that we are speaking only of main tendencies. We are leaving out of consideration various exceptions that make it appear to some people as though there were no such general principles as those we are setting forth. Some sellers, for example, in deference to public opinion, or with a view to long-run profits, or both, do not always accept as much as they can get. Some sellers accept less in order that the field will not be too attractive to newcomers. And in the midst of war and war inflation, exceptions rule.

Furthermore, we have not discussed cases of monopoly and near-monopoly in which prices have unusual difficulties in fulfilling their economic functions. In the case of a monopoly, the competition of buyers does not meet the competition of producers. Therefore, the efforts of consumers to obtain goods, while they tend to drive up prices, do not have the compensating influence of stimulating increased production of these goods. For it is true, ordinarily, that a producer who has no concern over the output of competitors can increase his profits by limiting his own output. Thus, competition among buyers of aluminum does not affect the supply, as does competition for a commodity like cotton cloth that can be freely produced. Consequently, prices of monopoly-controlled commodities may move goods, as Government-controlled

railroad rates may move trains, but without the economic effects that follow when the volume of production is more effectively controlled by the competition of buyers. The investigations of the building industry by the Lockwood Committee of New York and the Daly Committee of Chicago show to what extent the consumers' desires concerning volume and quality are sometimes frustrated when groups of producers get together to eliminate competition.

Furthermore, however inexorable economic law may be, it does not take effect instantaneously. 'It is not a policeman who arrests a criminal the moment he finds him committing a crime. It is a potter gradually shaping a plastic material to his will.'[3] The discussion that follows is sure to be misunderstood by any one who loses sight of the qualifications we have just made.

CHAPTER XVII

PROFITS DETERMINE WHO PRODUCES THE GOODS

By means of price bidding, buyers not only determine who gets the available goods to-day, but for the most part what goods are to be produced in the future. Sellers may do their utmost by means of advertising and salesmanship to influence choice; but after they have done their utmost, the choice remains with the buyers. The prices they pay to-day are, in effect, orders for future production. Leave them alone and they'll come home, bringing the goods behind them. People who spend money thus determine what will be produced, because those who produce succeed only if they make what people with money to spend wish to buy.

As a result, production which is not determined by the buyer necessarily remains small in volume. It is self-limiting. It is confined to goods produced by those who mistake the buyers' wishes, or who carry on business (until they fail) for their own satisfaction. The bookseller who proudly announces that he is in business, not to make money, but to spread the habit of reading[1] is not in business at all, but in philanthropy; and he can continue distributing books from philanthropic motives only as long as his money lasts. So, also, a publisher who produces unsalable books, merely because he thinks they ought to be published, is an exception to the rule because his business is sterile; it has no means of reproduction. As a rule, production is and must be governed by the wishes of the people who spend money. And they express

their wishes — cast their votes, so to speak — by the very act of spending the money.[2]

Consumers control Production by their Dollar-Votes

This is a democratic means of determining what is to be produced. In the domain of commerce, every human being has a vote every time he makes a purchase. No one is disfranchised on account of age, sex, race, religion, education, length of residence, or failure to register. Every day is election day. The buyer casts his vote wherever he goes. The votes are counted at once and with few errors; the cash register is more dependable than the ballot box. Those in charge of the polls are dependable, too, for since they are seeking profits, it pays them to have prompt and accurate records. Moreover, minorities count. In fact, the price and profit system very nearly attains for economics the ideal that is sought for politics by the advocates of proportional representation. Minorities that are so small as to be insignificant in national and even in State elections, direct production according to their wishes. Technical books, works of art, surgical instruments, and other items that literally fill many volumes of trade manuals, are regularly produced in response to the dollar-votes of fewer than one tenth of one per cent of the voters.

The objection will be raised that the consumers' franchise, with its property qualification, is undemocratic: it is heavily weighted, like the political franchise in Prussia before the War. In other words, the influence that any one consumer can bring to bear upon production varies directly with the amount of money he has to spend. True; and as a result human productive powers are not directed to yield the highest possible sum total of human satisfactions. But the fault is not with distribution ac-

cording to price. We shall clarify our thought if we avoid confusing two distinct questions. One question is this: Who is to decide what shall be produced in exchange for the dollars of each purchaser? The other question is this: How shall the total number of dollars be apportioned among the purchasers? They can be apportioned equally (and can thus, according to some theories, direct production to the maximum satisfaction of society as a whole) only under complete communism. But no matter how the total purchasing power is apportioned, the fact remains that the established methods of determining prices, profits, and production — though not perfect — are extraordinarily effective methods for guaranteeing each buyer exactly what he wants up to the limit of his dollars.

Even if the total purchasing power were distributed equally, consumers would still want to control production, would still insist on freedom of choice. Let the reader try the matter out for himself — no matter who he is, no matter how rich or how poor, no matter how conservative or how radical. To whom would he be willing to turn over the decision as to what should be produced as his share of the total output? To a city council? To bank directors? To labor-union officers? To Congress? Which of his choices would he be disposed to delegate? His choice of food? Amusements? Books? Cigars? There is but one answer. Even if his dollar-claim upon the total output were precisely the same as that of every other consumer, he would still prefer to exercise the freedom of personal choice; and the most effective way to register his choice would still be through dollar-votes. He does not need the recent tragic experience of Russia to convince him that slow and bungling would be the best efforts in his behalf of even the most devoted official directors of production.

In our price and profit economy the individual citizen has much more control over business than he has over government. Slow, indirect, inarticulate, as a rule, are the ways open to him for expressing his political desires. So it often happens that his vote at the polls is far from being an effective demand. His vote in the markets, on the contrary, is usually effective because only those producers who heed it can stay in business. He who seeks profits must do his utmost, not only to keep account of to-day's market election returns, but to anticipate to-morrow's.

Prices and Profits determine how much is to be produced

When prices and profits thus play their part, they answer the question, How much of each commodity shall be produced? When consumers are willing and able to pay a higher price for balloon tires, more are produced; when they are unwilling or unable to pay as much, production falls off — assuming that producers have adequate knowledge and that exceptional factors do not control the situation. These assumptions, we are all well aware, are often contrary to fact. In the long run, however, the prices at which goods are sold — not, let us observe again, the prices at which goods are *offered* — regulate the scale of production of each commodity.

Consequently, at all times, while the production of some consumables is being increased, the production of others is being curtailed. When the supply of leather in relation to demand is large, profits decrease and less leather is produced. If at the same time the supply of sugar in relation to demand is small, profits rise and more sugar is produced. If every acre of land were utilized to full capacity, all our warehouses would be jammed with useless products. But there is no danger of such a pleth-

ora. As soon as the output of foodstuffs increases too rapidly, consumers show by the way they spend their money that they want other things more than they want additional food. Wise producers act accordingly. But whether they are wise or not, the fact that they *must* pay expenses or presently stop adding to surplus stocks protects society, under a price and profit régime, from such vast wastes.

Any limitation of production by capitalists, however, is ascribed by many people to what they call the sabotage of profit enterprises. 'Under its dominion,' we are told, 'basic production languishes, while for a time salesmanship and production of non-essentials flourish. Ford can make more cars and the tobacco men more cigarettes, but the farmers must stop growing wheat and apples.' [3] The assumption seems to be that industry, once freed from the restraint of the profit motive, could increase indefinitely and simultaneously the output of everything the people might desire. This is impossible. Even if greed were banished from the world and love ruled, it would still be necessary constantly to decrease the output of less-desired goods in order to increase the output of more-desired goods. And this is precisely what is now going on. In the ordinary course of price bidding, millions of people daily express their relative desires, not only for tobacco and wheat, but also for cotton and silk, phonographs and radio-sets and everything else that is offered for sale. Profit-seekers respond by making more of whatever the people particularly want and less of other things, because that is the way to make profits and avoid losses. Why blame the profit-seekers? If they increase the production of cars and cigarettes and decrease the production of wheat and apples, they act in response to what they believe to be the mandate of consumers.

Most Producers cannot increase Profits by limiting Output

Such action is rarely the result of a conspiracy to maintain prices. Rather it is the result of the independent decisions of thousands of enterprisers, each of whom *must* produce no more than he can sell at a profit, or run the risk of bankruptcy.

Yet managers of industry are constantly charged with limiting production in order to maintain prices, and thus make excessive profits. 'It has long been evident,' says one critic, 'that the desire to make as much money as possible operates to lessen production.' [4] Those who make this charge overlook the fact that it is only under the highly exceptional conditions of complete monopoly, or agreements that bind all the producers of a given commodity, that output is subject to such control. Certainly there could be no such control of the production of bread, shirts, nails, pencils, chairs, jewelry, and thousands of other familiar household articles. For agreements among the producers to limit the output would be exceedingly difficult to arrange; the temptation to violate the agreements would be strong; violations would not be easily proved; and, finally, the legal prosecution of the violators would be impossible because the agreements would be illegal.

Producers would be tempted to violate such agreements because the profits of the individual producer usually increase with the volume of *his* business. He would like to have his competitors produce less, but he has no incentive to limit *his* output. Does any one imagine that makers of Buick cars ever cut down schedules in the hope of maintaining prices, while Studebaker factories are running at capacity? Does any one suppose that the makers of Phœnix hosiery can force consumers to pay more for their product by producing less, when

the makers of Onyx and Holeproof and Van Raalte and every other line would jump at the chance to supply the deficiency? These cases are typical. In the face of such competition, each producer is constantly striving to produce more goods, and at lower costs. He knows that the chief result of limiting *his* output would be to give his competitors a larger share of the market. Since he must compete with other producers for the same customers, he is constantly striving to be in a position to sell, if buyers insist, at lower prices than any one else.[5]

The individual capitalist, then, does not limit his output in the interest of other producers; neither does he discharge men because it is advantageous to employers in general to have large numbers of men seeking employment. 'Individual capitalists,' it is said, 'find it to their economic interests to maintain a reserve army of the unemployed.' [6] This is not only far from being true in general, but it is doubtful if a single case can be found in which an employer discharged men in the supposed interest of employers as a whole. If the individual employer hires workers, he does so because he believes that he can profit by so doing; if he discharges workers, he does so because he is convinced that he can no longer profit by employing them. In neither case is his conduct determined by the effect on the labor market.

One Function of Profit is the Elimination of the Unfit

If a man does not succeed in making profits, sooner or later a more efficient producer takes his place; and this is for the good of society. Indeed, it is in the very process of selecting the fittest for survival and eliminating the rest, that profits and losses in the long run conduce to material progress.

By means of the dollar-franchise, the voter determines

who is to make profits — who is to be allowed to stay in business. With his dollars, he votes for his industrial representatives. He votes to continue in office those, and only those, who make the articles he buys, and who distribute them in ways and at prices that come nearest to satisfying him. In this way he is increasing the trade of chain stores and mail-order houses and ruining many independent, high-cost merchants. Just as surely, he is now deciding which manufacturers of automobiles are to be allowed to continue producing, and which of the two hundred or more makers of tires — five of whom are equipped to supply the total demand — are to go out of business. He is forcing publishers, as well, to watch the election returns. Of three newspapers in a certain city, one will soon be obliged to suspend publication. Which shall it be? The people will decide. This process of killing off the unfit is even more ruthless in its operation than natural selection among human beings, for in business the process is not tempered to such an extent by humanitarian impulses. The managers of industry are, therefore, a responsible ministry, much more amenable to public control than politicians. 'Big Business' is not and cannot be the autocratic thing it is often said to be.

It does not matter how successful a manager may appear to be, or how large a business he may build up, a profit and loss economy may eliminate him in the ordinary course of events. 'Nothing succeeds like success' is only a half-truth, for the very success of a business may interfere with future success. Mere size is no cause for public alarm. As a matter of fact, the United States Government report on profits in 1917 showed that the largest firms in most of the 108 industries covered by the report, instead of earning more than the smaller concerns, earned less.

In a price and profit economy, few enterprisers can long hold their own who are arbitrary, or reckless, or over-cautious, or lazy, or wasteful, or unprogressive. Few can survive, whatever their personal qualities may be, whose costs are relatively high or whose forecasts of consumer demand are especially faulty. The many thousands of such men who every year fail in business contribute less to society, as a rule, than their competitors. Their labor and materials, if used under abler direction, would do the community more good. To allow such men to continue in charge of industrial enterprises would be to disregard public good, as it would be under communism, or socialism, or any other industrial organization. To eliminate such men is one of the chief functions of profit.

How this beneficent function could be performed in a radically different industrial society is difficult to see. Obviously it would not be performed at all, except in slow and bungling ways, if profits were abolished and the Government controlled all industries. For, since such control would furnish no standards of comparison, the people would never know how much better their industries might be managed. There could be nothing comparable to the pace set and the standards provided by the rivalry of Western Union and Postal Telegraph, of Buick and Studebaker, of Sears-Roebuck and Montgomery Ward, of the Waldorf and Childs restaurants, to go no further into the long list of keen rivals, with the services of which the public is familiar.

Furthermore, we know from long and costly experience that, even if the inefficiency of certain public servants were notorious, it would be next to impossible to get rid of them. Indeed, the very necessity for removing the unfit from responsible positions as quickly as possible appears to be overlooked by those who are now seeking

to abolish profits. 'The very fact that these unsuccessful attempts are numerous,' says one critic, 'is an indictment against the capitalist system, since they represent a large economic waste.' [7] Indeed, they do; but how much greater is the waste when, as is certain to be the case under Government control, the relatively inefficient are *not* promptly eliminated — often not even discovered. The ruthless functioning of profit and loss, though at times hard on the least capable individuals, is on the whole most economical for society; is, indeed, best in the long run for the least capable themselves.

Many reformers contend that any one who wishes to produce goods and any one who owns a stock of goods should receive bank credit; that they are prevented from borrowing by the 'money monopoly.' [8] Some contend that the Government should issue money to owners of stocks against goods stored in Federal warehouses.[9] But if the mere desire to produce goods or the mere possession of goods were a valid demand on the banks or on the Government for credit, prices and profits could not mean what they mean to-day. Holders of goods would be relieved of the pressure to sell to such an extent that stocks would pile up and prices would shoot up even more disastrously than under the prevailing system. Moreover, production schedules would no longer be determined mainly by millions of dollar-votes cast daily in thousands of markets, but in part by the wishes of anybody who wanted to produce goods. In short, a new régime would have usurped a large part of the functions of prices and profits.

The present régime, while taking responsibility away from the less efficient, constantly impels the more efficient to progressive action. For in order to continue to succeed they must adopt new ideas, discover better

methods, improve their products, reduce wastes, heed the wishes of consumers, and in general merit the goodwill of employees, patrons, and the public. Thus, since 1920, many of the railroads in the United States, in their efforts to earn profits, have greatly increased their efficiency, their services to the public, and, incidentally, their profits. In short, profits and losses for the most part result, not only in retaining the ablest industrial leaders, but in spurring them constantly to greater social services.

No Other Way of determining Production is Feasible

We have seen that profits result from the taking of risks; that risks are due chiefly to consumers' freedom of choice; that consumers, in exercising their freedom, determine what goods are to be produced and who is to produce them. The question arises whether this freedom of choice is worth what we pay for it. On every hand is evidence that it results, not only in profits that seem inordinate, but also, under the powerful urge of the profit motive, in the turning-out of unworthy products. And then foolish buyers, through the very process of spending their money for such things, direct the energies of workers to the making of more frills and furbelows, while multitudes are in need of food and fuel. What a waste is involved in making and marketing worthless, even harmful goods — vapid films, freak dresses, ugly bill boards, and the like — all produced for profit! This is one of the chief complaints of those who decry free enterprise under the urge of the profit motive. It is 'a clumsy, ignorant device,' we are told, 'that allots ability and capital constantly to unnecessary and harmful activities.' [10] Surely, the world would be better off if the choice of the buyer were *not* so free and wide.

But this brings us sharply back to the function of price.

In just what directions should freedom of choice be curtailed? If prices and profits are not to answer that question, how is it to be answered? The answer given in *A Constitution for the Socialist Commonwealth of Great Britain* appears to be rather vague. There may be some commodity, it is said, the use of which 'is not seen to be of any public advantage — it may, even, possibly be regarded as having disadvantageous consequences to the community so that consumption or use, whilst not forbidden or prevented, may come to be discouraged by exceptionally high prices.' But this does not tell us who is to decide in just what direction production is to be curtailed by means of high prices. According to this plan, prices are to be 'determined by the Social Parliament, on the recommendation of its Standing Committee on Finance, according to the feelings and opinions of the community for the time being.'[11] But this gives us no idea how the Standing Committee on Finance can possibly discover what the feelings and opinions of the community are, as quickly and as accurately as they are now discovered in the markets.

No one who cries out against wasteful and harmful products proposes to have his own freedom of choice restrained. He assumes that in an ideal economic order, where nobody wasted the labors of men in the pursuit of profit, he would still be able to buy about all that he now enjoys; for, naturally, his own expenditures seem to him sensible. He does not expect to give up his favorite cigar or cheese, or anything else except, perhaps, certain newspapers or vaudeville shows that are beginning to bore him. It is always some other man's way of spending money that he wishes to curtail for the common good. So when Thorstein Veblen lashes, with all the thongs of his far-flung vocabulary, the conspicuous waste of the

leisure class, and when Hartley Withers condemns it for 'consuming things that it does not really want,' we should bear in mind, however tempted we may be to join in the flaying, that every consumer is the sole judge of what he really wants. No other judge, in Russia or elsewhere, has ever been able to satisfy him. In short, although it is obvious to every one that other people's ranges of choice are too wide, it is not obvious how those ranges are to be greatly changed unless by the functioning of prices and profits.[12]

Moreover, if a considerable majority of the citizens really want to restrict the buyers' markets, they can do so without abolishing any essential feature of a price and profit economy. In a democracy, the way is always open. Already, in the United States, the law has made it next to impossible to carry on traffic in opium, and rather difficult in most States to deal in spirituous liquors. The pure food and drug laws have further limited the buyers' range of choice. The huge profits that were once made from the sale to a gullible public of certain fake medicines did not save the business. No one doubts that the voters of this country, if they cared enough about it, could abolish any other industry, wasteful or not — the manufacture of chewing gum, for example, or cigarettes. Profits and the price system are not the chief obstacles.

Conclusion

Thus, for the most part, the people themselves decide every day, through accepting or rejecting millions of wage and price offers, what the production of the country is to be and who is to do the producing. 'What they buy, they make.' The system does not work perfectly. That is partly because producers, through ignorance of facts that are now beyond the reach of private enterprise, or error in judging the permanence of the market, miscalculate the

nature and extent of consumer demand. They fail to forecast the ways in which freedom of choice will be exercised.

Certainly the system can be made more effective, for it will not be difficult to inform producers, more promptly and more accurately than hitherto, concerning stocks on hand and under way, the trend of demand, and the prospects of profit. By means of this information-service, and by other means to be suggested later, rather than by means of price and production control, the Government can help to direct productive efforts in closer accord with the desires of consumers, and incidentally to forestall some exceptionally large profits and losses.

But, even if producers were fully informed, have we reason to expect that they would be governed by the wishes of consumers? Certainly we have, for under a competitive system in which men must sell goods at a profit, they either respond promptly to consumer demand or go out of business.

One limitation, however, to consumer control of production schedules is of paramount importance. When, for any reason, the flow of money into consumers' hands is insufficient to take away, at current prices, the goods that are flowing into consumers' markets, there is an increase of involuntary unemployment and a slackening of output. Thus less wealth is created, not because the people want less, not because they choose to work less, but solely because certain monetary factors which they do not understand, and over which they have no control, prevent them from obtaining enough purchasing power to take from the markets the commodities they have already produced and would like to consume. This is the outstanding defect of our money and profit economy. It is the central theme of Part V of our discussion.

CHAPTER XVIII

LARGE PROFITS ARE SOMETIMES UNAVOIDABLE

If all this be true, if it often happen that sellers have little to say about costs and prices, and if buyers determine by their dollar-votes who is allowed to stay in business, then it must often happen that sellers make no profit at all. That this is the case, we pointed out in Chapter XII. We showed that at times more than half the reporting corporations record no net income. Furthermore, the available figures do not include the large number of unsuccessful enterprises concerning which the Treasury Department has no records. During the current year, because of faulty bookkeeping, many business men who suffer losses will think they are making profits. In fact, it is an open question whether business as a whole, year in and year out, makes any profit at all, as we use the term. When our published statistics are sufficient for the purpose, as they will be when we are aware of the practical value to the community of such publicity, we may find that a combined balance sheet for all enterprises will show no profit. In any event, as shown by the statistics for deficits and business failures in Part III, the profit of business as a whole is not at a high rate.

For the very reasons that some business men suffer exceptional losses, others enjoy exceptional profits, far larger profits than most men realize. In strict truth, they cannot help it. This statement, no doubt, will be greeted with derision by many readers, who cannot quite picture the helpless capitalist, forced to accumulate large profits merely because somebody else has had so much to do with his costs and his selling prices. The

cartoons never make him look like that. And yet it is literally true, without any important qualification, that at times many business men cannot help making large profits — cannot help being 'profiteers,' in the common use of that term.

Before we condemn them as 'unfair' and 'unreasonable,' however, let us ourselves be fair and reasonable. Let us try to understand how it happens that some large profits must be realized, as long as sellers produce goods in competition with other sellers; and as long as buyers buy goods in competition with other buyers, and in the process of thus exercising their freedom of choice make prices what they are. Under these conditions, it is often the sellers who have no real freedom of choice. The very conditions that occasion losses to some guarantee profits to others. The war that helps one industry, ruins another; the tariff that brings profits to some sections, brings losses to others; the canal that benefits shipowners, injures railroads; the rain that saves some crops, destroys some trade; the inflated currency that spells profit for holders of stocks, spells loss to holders of bonds. Thus it is clear that large profits often come to men not, indeed, unsought, but quite uncontrolled.

Large Profits result from Rising Prices

This is plainly true of profits that result from a rise in the price of a given commodity, say cotton. Any one who makes cotton cloth must buy cotton. If the price of cotton then goes up, he is in a position to make a profit. To be sure, he can escape the profit due to the rise in the price of cotton by selling his product below the market price. But in that case he must arbitrarily allot the goods, instead of allowing the distribution to be determined by the competition of consumers. Or, he can avoid making

profits by holding his output until the price falls; but in that case he prevents price from moving the goods into any consumer's hands at all. In either case, he is interfering with the functioning of price. That is not a service to society.

Moreover, if he wishes to continue in business from one cycle of prices to another, he must protect himself against the *fall* in prices that is sure to come, over which also he has no control, and the time of which, even with the aid of all the available forecasting methods, he cannot predict. If a merchant were to refuse to accept profits due to rising prices, he might soon be in bankruptcy; for he has no choice about accepting losses due to falling prices. The leather companies, for example, have been able to stand large losses and continue in business only because of large profits realized prior to the leather price-slump of 1920.

Large Profits result from a Rising Price-Level

The profits and losses of these companies were due partly to the fact that leather prices moved up and down faster than the prices of commodities as a whole; that is to say, faster than the general price-level. But the movements of the general price-level are in themselves causes of profit and loss. From 1915 to 1920, for example, wholesale commodity prices in the United States rose 147 per cent. Consequently, during this period there were extremely large profits, due solely to the rise in the price-level; that is to say, solely to the depreciation of the dollar, quite apart from profits due to any other causes. And over these changes in the purchasing power of the dollar, the individual dealer has no control whatever.

The experience of the Helvetia Milk Condensing Company in 1917 is a case in point. Profits for that year appear to have been over 20 per cent on cost and over

60 per cent on investment. In explanation of these high rates, the company wrote to the Federal Trade Commission as follows:

'The profit which the company made during the year was regulated by conditions entirely beyond the control of the directors and officers of the company. During a large part of the year the demand on the market was so strong that it was with great difficulty that the price was kept from going much higher than any point reached during 1917. . . . Most of the price advances during the year were made by us in self-protection and in an effort to keep orders from piling up on us beyond our capacity to fill. We were compelled on one or two occasions to withdraw prices, and refused to take orders, except at prices to be determined at the date of shipment (which in a rising market would naturally be higher), this plan being adopted on account of the necessity for protecting ourselves against the unusual and abnormal buying.' [1]

If we are interested in reform, we should begin by placing the blame for this kind of large profit-making exactly where it belongs. If this is profiteering, the depreciating dollar of 1915–20 made us into a nation of profiteers. In the main, the profiteers did not make the high prices; the high prices made the profiteers. To a considerable extent, as we have shown elsewhere, profits and losses due to this cause can be prevented, if the Government will make a stable price-level the deliberate aim of financial policy, and use toward this end the monetary means over which it already has control. But, as long as price is allowed to function at all, profits and losses due to fluctuating price-levels cannot be abolished; for an *absolutely* stable price-level is unattainable by any means whatever.[2]

Large Profits result from Low Production Costs

Even if a stable general price-level were attainable, even if no large profits resulted from changes in individual prices, still some large profits would result from unequal costs of production. The reason is simple. Whenever two or more producers supply the same article to the same market, and the market requires their output, and competition is allowed to have its effect, competition tends to keep the price down to the cost of production. But for no two producers is the cost the same. Whose cost of production, then, tends to determine the price? Obviously, that of the *highest-cost* producer whose output is absorbed by the market.

Almost any commodity will serve as an illustration: corn, let us say, or soil pipe, or gasoline. But since coal 'profiteers' have had so much attention of late, let us consider the price of coal. Here, for example, is a coal company with rich mines, able management, and exceptional labor supply. It can load cars at the mine at a lower cost per ton than any other company, but it cannot supply all the coal that is used. Clearly, then, its cost of production cannot determine the price of coal. Otherwise, sooner or later, all other producers would have to shut down, or operate at a loss; and they *could* not long produce at a loss. Consequently, the price paid for coal must be high enough to bring to the market all the coal the market needs, including that part of the required supply that is mined at the highest cost. The company that produces this part of the supply works under the greatest disadvantages. Nevertheless, if the market regularly needs this company's output, it must, in the long run, pay at least enough to cover this company's cost.

But, in general, there cannot be more than one price in the same market. Nobody goes so far as to say that one

consumer, merely because he buys his coal of a low-cost producer, should pay less than his neighbor who buys of a high-cost producer. If prices were fixed on this basis, every one would insist on buying coal of the lowest-cost producer, and chaos would ensue. Since, then, in general there cannot be more than one price in the same market, each company that brings to market a part of the necessary supply will make a profit corresponding, as a rule, to the advantages it enjoys over its least fortunate competitor. The higher profits of the most favored producers will not be due to their reprehensible conduct; since it is the most *unfavored* producers who, in the long run, are responsible for the price that must be paid to all producers.

Government Price-Fixing does not prevent Large Profits

Under private ownership of coal mines, even though prices were fixed by the Government, large profits would remain for certain producers, unless the Government put the high-cost producers out of business. For to fix a price which would enable the less efficient or less fortunate firms to continue operation, would be to fix a price which would guarantee high profits to others. Much has been said of late in favor of Federal regulation of coal prices; but, whatever may be said with reason, the claim that price control would prevent large profits is unfounded. Any price that would enable all producers and all distributors to make any profit at all, would enable some to make very large profits.

This was demonstrated during the War. The Federal Trade Commission found that, under Government control of prices, certain low-cost producers of coal made large margins, certain high-cost producers made small margins, and 'the bulk of the production, of course, en-

joyed the large margin.' In a report of the Commission, we read that 'the outstanding revelation which accompanies the work of cost finding is the heavy profit made by the low-cost concern under a Governmental fixed price for the whole country.' [3] For the same reason, the McNary-Haugen bill, which proposes to fix the price of wheat, would result in large profits for some producers, or landowners, or both.

In this respect, coal and wheat are not exceptions to the general rule. In the zinc industry, for instance, the Federal Trade Commission found no unusual profits during the War except those of the New Jersey Zinc Company. These profits, in the opinion of the Commission, were due wholly to the possession of an ore body of unusual richness and purity. It is clear that an established price low enough to have prevented these large profits would have prevented most zinc producers from covering their costs. Government regulation of the prices of manufactured products, clothing, for example, would also guarantee large profits to some concerns. In the retail clothing industry, a few concerns have exceptionally low costs; a larger proportion have moderate costs; and a few have exceptionally high costs. A firm with low costs in one year tends to remain with low costs in subsequent years.[4] Evidently there are forces at work, of which the dominant one is doubtless able management, that enable low-cost producers to retain their advantages year after year. Consequently, if prices were fixed high enough to enable the least efficient competitors to stay in business at all, the most efficient would make large profits.

Some Large Profits are Unavoidable

Thus we see that distribution by the method of price bidding, which for most commodities and services is the

only method the people will tolerate, frequently results in a price far above the costs of the most favored producer; a price higher than is necessary to satisfy some sellers, higher than is necessary to induce them to continue in business. Consequently, profits are often far above the expectations of those who bought stock, and far above the amount needed to obtain new capital. The profits of the United Fruit Company, of the Woolworth Company, and of the General Motors Corporation will come to mind as examples. There are many more; there always will be.

For, prices being determined as they are, what is the business man to do about it? In exceptional cases he might arbitrarily set low enough prices or high enough wages, to put out of business some of his high-cost competitors. This is actually going on all the time; but it is not always a net gain to the community, and it is what the courts have punished some producers for doing.

So we return to our incredible statement: at any given time, there are many business men who virtually have no choice; they cannot help making large profits.

CHAPTER XIX

GOVERNMENT CONTROL OF PRICES AND PROFITS IS IMPRACTICABLE

EVIDENTLY, then, the Government cannot regulate profits — except in so far as it can prevent monopolies and stabilize the general price-level — without regulating individual prices. But it must be equally clear that the Government cannot regulate individual prices without to that extent taking over the functions of price. For, once prices are fixed and thereby prevented from functioning, somebody has to decide who is to be allowed to buy, at the fixed price, not only the available supply of leather and cotton, but also the supply of aluminum, theater tickets, safety-razors, works of art, and everything else. The moment the Government prescribes a lower price for anthracite coal, for example, than the competition of buyers would establish, somebody must decide how much is to be allotted to Massachusetts, how much to theaters, how much to women's clubs, how much to John Smith. And no government can possibly make such decisions with as little dissatisfaction to the governed as they are now made, every minute of every day, by the governed themselves, under a price system that, while giving rise to some large profits, attends to the almost infinite details of distribution with an efficiency that no other system has ever approached.

The members of the War Industries Board can bear witness. Even with the requirements of war as a guiding principle, and with eagerness to do right, these exceptionally able men — far abler than the usual Government officers in time of peace — were unequal to the task.

Many of their decisions were ridiculous — necessarily so. How could anybody know enough to tell in what proportions the available steel, for instance, should be allocated among makers of shells, bridges, cutlery, watches, rails, and a thousand other commodities? Something unusual had to be done because, once the mistaken policy of the Treasury Department had allowed inflation to run riot, it was not possible to continue to produce and distribute in response to individual desires and at the same time wage collective warfare effectively. 'Business as usual' was impossible. In this emergency, Mr. Hoover had some success in controlling prices (and therefore profits and distribution) in certain industries; but only because he had behind him almost unlimited money and power and the compelling motive of patriotism. The people tolerated this interference with the functioning of price, however, as they tolerated conscription, merely as a war emergency measure.

No Congress, no Cabinet, no commission — not all the public officials in the country put together, even if they gave all their time to the work — could possibly measure and meet the desires of one hundred million people as accurately and quickly as they are now measured by the price system — a system, let us repeat, under which some large profits are unavoidable. During the past generation no official board would have allocated enough labor and materials to the automobile industry to enable it to expand, as it actually has expanded under the mandate of consumers' dollar-votes. No official board, sensing the will of the people, would have voted to make a million cars a year that could be sold below $500. Even if such a board had decided on such a program, it would not have selected as director the ablest available man for this particular enterprise and given him sufficient freedom to

carry it out. Yet this is exactly what the price and profit system has done. During the credit strain of 1921, automobiles were officially declared to be non-essentials; but consumers, by purchasing more cars the next year than ever before, promptly proved that they did not share the official view. Possibly the country would be better off with fewer automobiles. People who think so have a right to their opinion, and the further right to discourage the expansion of the industry by refusing to buy or to use motor cars. This course, however, few of the objectors take. It is some other man's freedom of choice that they usually wish to curtail for the common good.

The professor may sit in his study, or the Congressman in his council chamber, and figure out 'saturation points' in various industries and classify products as 'luxuries' and 'essentials.' But buyers are not interested; they decide these matters for themselves. In time of peace, they will not tolerate rationing by the Government. Then, the guiding principle of production and distribution is and must be individual desires; desires so numerous, so varied, so capricious, that they can be recorded only by the delicate machinery of price — by the millions of dollar-votes that are cast daily in the ordinary course of marketing.

It is the same with interest rates. If Senator Ladd's bill became law, and the rate on borrowed money were fixed at four per cent, or if Senator Magnus Johnson succeeded in his attempt to fix the Federal Reserve rate at two per cent,[1] and there was not enough money to go around at the price, somebody would have to ration it. But money is different from motor cars, we are told; for if there is not enough money, all the Government has to do is to print more. That is true. But then we may have inflation, which means that prices shoot up faster than wages, and

money becomes scarcer than ever. As prices rise, more and more money is needed to carry on a given volume of trade, and the demand for money outruns the supply. Witness the hopeless struggle of the printing-presses in Russia. If the State keeps on printing money, without due regard to the relation between the flow of consumers' goods and the flow of consumer's income, it gets into a vicious spiral, in which it never can satisfy the cry for more money. Even if it allows interest rates to go up, in response to increased demand, once in that spiral it cannot supply enough money. For money is different from motor cars in another respect: increased supply does not tend to decrease demand, but the reverse. Nor is the increased supply exchangeable for more bread, or shoes, or cottages. In Germany, as we have said, a trillion marks grew where one grew before, but not a trillion blades of grass; and very few people were as well fed, or clothed, or housed, as formerly. So, for the common good, the best we can do is to allow the price of money, along with the price of wheat to vary with demand and supply.

Communism offers no Satisfactory Substitute for Prices and Profits

Communism does away with prices and profits. It thereby disfranchises consumers. As they can no longer elect their commercial representatives by casting their dollar-votes, they have no effective means of indicating what they want to have produced. This might not matter if the community had infinite wealth. If there were no limit to the volume and variety of goods that could be produced, everybody could call upon the State for everything he wanted. But even under communism, wealth would be finite. Arbitrary limitation of production in certain directions would still be necessary in order that

output could be increased in other directions. There would still be a shortage of gowns of the latest style, 'standing room only' at the most popular musical comedy, and not enough limousines to go around. Consequently, the State would have to ration everything. As the State now determines in time of war exactly what food, clothing, shelter, medical care, organized recreation, and so forth, is to be provided for each soldier, so the communistic State would at all times regulate the consumption of each citizen and direct production for the purpose of meeting the 'standard' requirements. To the boundless dissatisfaction of everybody!

Even to the dissatisfaction of the peasants of Russia, where the consumption budget has long been so limited and so nearly uniform that communism ought to succeed, if it can succeed anywhere. It appears to be a failure. The communism of the first years of this vast experiment gave way to an economic order that embodies large-scale production of certain staple goods under a form of centralized collectivism, with ordinary accounting methods, small-scale farming under private control, and, in numerous trading enterprises, ordinary price and profit capitalism. Having abolished its own capitalists and reduced the national output to one third or less of the pre-War volume, Russia proceeded to import such capitalists as it could attract to its precarious régime, and thereby increased its production. From this gigantic and dramatic experiment, both radicals and conservatives are in danger of drawing sweeping conclusions that are not warranted by the extraordinary conditions under which the experiment was essayed. But from one conclusion there is no escape: Without the guidance of price and profit there is no satisfactory means of determining what goods are to be produced or who is to get them.

No Government can tell what Price will yield a 'Fair Profit'

Exactly what the price of wheat, or motion-picture films, or tin cans, or anything else should be on any particular day, in order to preclude profiteering and yet guarantee a 'fair profit,' it is impossible for Government officers or anybody else to tell. Even if it were possible to tell to-day, to-morrow somebody would produce the same article at a lower cost. Thus he might become a profiteer without being aware of the fact until the balance sheets revealed the evidence. Recently the city of Boston bought one pair of lions for $2400, and one Anubis baboon for $150. No charges of profiteering have been heard. That is partly because lions and baboons do not figure in the family budget, partly because the man in the street is aware that he has no means of knowing what prices would yield a fair profit to dealers in lions and baboons. But he is no better informed concerning goloshes and umbrellas. The fact that the price of anything is higher than it was, or higher at home than abroad, or higher than we can afford to pay, or has gone up faster than other prices, does not prove that anybody is making unusually high profits, or that a lower price would benefit the community. This great difficulty in identifying the profiteer by his prices is another reason why every one — in Congress or out — who wants to be fair and helpful will be wary of making charges against any man.

In view of the trades and industries that are most frequently denounced for profiteering, it may astonish many people to find that out of the 108 groups covered by the Senate report for the year 1917, those that earned the lowest rates of profit were the following: capitalists, real estate brokers, telephone and telegraph companies, trust companies, commercial banks, light and power compa-

nies, mortgage loan concerns, laundries, and ice manufacturers.[2]

It is clear, then, that we must either sacrifice our freedom of choice as consumers, together with the profit urge to individual initiative, or retain an industrial society in which, in any given year, a few men are certain to make large profits, some of these men through no special fault or merit of their own. This being the case, it is folly to cry fraud and corruption, and organize a congressional investigating committee, every time it appears that somebody has realized large profits.

Yet Harmful Profiteering can be reduced

But it does not follow that socialism or communism is the only means of reducing those vast inequalities in wealth which are part of the indictment of a profit-making economy. How much profit a man shall be permitted to *make* is one question; how much he shall be permitted to *retain* is a totally different question. By means of railroad regulation, income taxes, inheritance taxes, and profits taxes, the people are already appropriating for public use a considerable part of the profits of business enterprise. They can take a larger part whenever they want to. Since those who do not directly share in profits have a large majority of the votes, they can elect representatives pledged to appropriate all the profits. The main reason they do not do so is the well-grounded fear that incentives to productive effort may be so weakened that higher tax rates will result in less real income, not only for the Government, but also for themselves. Most people do not care to make themselves poorer merely for the sake of making the rich poorer. And taxation, as we shall see presently, is not the only means available in a price and profit economy of bringing

about a more equitable distribution of the products of industry — a more democratic dollar-franchise.

Neither does it follow from our failure to discover any workable substitute for a profit economy, that we must accept the prevailing profit economy just as it is. 'Capitalistic civilization' has already done much to curb or destroy various forms of profit-making. It has waged effective warfare against men who bribe Government officials, operate bucket-shops, counterfeit money, grant secret rebates, falsify income tax reports, misrepresent products, or destroy competition. Nowadays, these profiteers are no more condoned than embezzlers or highway robbers. They are not essentials of capitalism. The nearer we come to abolishing them, and other socially unproductive and even predatory enterprisers who still flourish, the nearer we come to realizing the full benefits of a price and profit economy.

It is folly to insist that profit-seekers, in serving their own interests, always serve the public interest. As a matter of fact, the profit motive, however effectively it promotes the common welfare in other ways, does not always safeguard natural resources. The individual producer of coal, for example, sometimes profits by wasteful methods; sometimes, indeed, has no choice. He cannot possibly pursue a policy which is best for future generations as long as he has to compete with men who ignore the interests of future generations. So, also, no lumber company can afford the expenses of reforestation as long as it must compete with companies which have no such expenses. This does not mean that we must therefore relinquish all advantages of a price and profit economy; it means that there are various social purposes, including the conservation of natural resources, which society cannot rely on the profit motive to serve. As soon as we understand all this,

as soon as we are thus ready to discriminate as carefully as possible between profit-making enterprises which serve society and those which do not, we are in a better position to take measures against the baneful activities of the latter.

When we consider various kinds of profiteering, rampant in former generations and vigorously prosecuted to-day, it is evident that we have made progress. We can and must make much more. Indeed, while the fourfold indictment of our industrial system is based as it is upon indisputable shortcomings, we cannot justify that system in its entirety by such an exposition as we have just presented of the functions of prices and profits. The way ahead, however, is not the way of revolution. The present industrial organization, constructed through generations of labor and sacrifice, through innumerable experiments and painstaking study, is so delicate and complicated an instrument, with so many interdependent parts, that ill-considered changes throw the mechanism out of gear. Profit-makers suffer thereby, but not so much as other people. Adjustments must be made gradually, year after year, on the basis of a better understanding than we now possess of the functions of prices and profits and various other factors that keep the whole organization in some kind of working order. The task is an adequate challenge to the best intellects. To devise plans for betterment and gradually get them to the point where they will achieve their purposes, without in the process doing more harm than good, will take all that humanity can muster, generation after generation, of brains and patience and courage. To consider the possibility of devising such plans is the main purpose of the following chapters.

PART V

MONEY AND PROFITS IN RELATION TO CONSUMPTION

CHAPTER XX

THE ECONOMIC PROBLEM AGAIN

WHY is it that we cannot long contrive, as consumers, to acquire and enjoy the goods which, as producers, we can readily turn out? From now on, that question, with which we began our discussion, and which we have shown to be essentially the problem of a money and profit economy, will be the center of our interest.

In the whole perplexing realm of economics, no other question perplexes so many people. The wide diversity of answers to that question by statesmen, economists, and social reformers — ranging from bank credit to the profit motive, from immigration to irreligion, and from unbalanced industries to sun spots — shows that even those who regard themselves as specialists in the field are nonplussed. Little wonder, then, that the man in the street is bewildered. To him nothing is more incomprehensible than the fact that with millions of people in dire poverty, with millions more in want of the minimum requirements for comfort, health, and security, with scarcely a man, woman, or child who is not eager for more of the good things of life, the industrial world stops short of creating the good things well within its power to create, because of the ever-imminent danger of creating too much. Consumers in constant fear that they cannot get enough, and producers in constant fear that they will produce too much!

Increased per Capita Consumption is the Aim

Let us consider again the anomalies of this situation. Let us observe, first of all, that since nearly all human

beings want more of the material satisfactions of life, the end of all economic activity is a constantly rising standard of living for the people generally.

Let us note, in the second place, that the attainment of this end requires, not only a constantly increasing per capita volume of production, but also a constantly increasing per capita volume of consumption. That is, in fact, precisely what men mean on the material side when they speak of a rising standard of living. They do not mean a growth in facilities for production, or in stocks of unsold goods, or in bank credit, or in dollar wages. They mean simply an increasing per capita volume of goods used up by consumers.

All this was perfectly evident to pioneer communities; to them increased consumption clearly meant increased satisfactions, and saving was clearly incidental to that end. They raised corn and made wheelbarrows solely with the idea of having them used up. They not only produced what they consumed, but they consumed what they produced. They had no doubt concerning what they were working for, and no fear of producing more goods in general than they knew how to use to advantage. If, by any chance, they produced more of any particular commodity than they wanted to consume at the time, this was an occasion for rejoicing rather than a cause for concern. It enabled them either to produce more of something else, or to enjoy more leisure. But *general* overproduction was an impossibility.

Consumption is just as truly the final aim of the vastly more complex money and profit communities of to-day. All our elaborate agencies of production and distribution are, in fact, organized solely for that purpose. Wheat is not raised to fill warehouses; clothes are not made to stock shops; ships are not built to rot in shipyards. Har-

vesting, transporting, building, trading — all the multifarious activities of our day — are directed toward the using up by the ultimate consumer of more commodities and services, more and always more, with the incidental aim ever in view of gaining more leisure without sacrificing material gains. Indeed, if this were not the aim, most saving would be utter folly.

Although some people may be inclined to decry this aim as materialistic, it is not at all inconsistent with higher aims; for though the voluntary overconsumption of those who are rich and foolish is not conducive to the higher life, neither is the underconsumption of the millions who have no choice. Disease, ignorance, malnutrition, child labor, fear of destitution — the long train of evils that poverty is heir to — stand in the way of the attainment by vast numbers of people of nearly all that makes life worth living. This tragedy is a closed book to many among the two per cent of the population whose incomes are above ten thousand dollars; for to them the statistics of the strugglers in the lowest income classes have very little meaning. To the fortunate two per cent this world seems to be, after all, a pretty good place to live in, just about as it is; and they see no reason for stirring up people to change it. If, however, they will open their eyes and look about them, they will find income statistics interpreted in terms of human suffering; and they will not doubt that, for most human beings, gains in the consumption of the products of industry are prerequisite to higher gains.

Business Stability is not Enough

With this as the ultimate goal of economic enterprise, business stability — that is to say, freedom from extreme fluctuations — is not enough. Those who regard

stability as the goal appear to overlook the fact that business can be just as stable in the midst of poverty as in the midst of plenty: just as stable in China as in the United States. It is upon a steadily increasing volume of consumption that standards of living depend — not upon steadiness of prices, or profits, or wages, or interest rates. Generally speaking, and apart from obvious qualifications, prices, profits, wages, and interest rates, as we tried to make clear in *Money*, serve the economic interests of society in so far as they do their part toward steadily increasing the volume of production and toward increasing consumption at the same rate.

Still, higher real wages are not enough. The goal is not only larger material incomes, but more leisure in which to enjoy those incomes and all the other good things of life. 'More pay and less work' — the aim which organized labor has often been censured for pursuing — should, indeed, be the aim of society; not necessarily less work of all kinds, voluntarily undertaken, but less work imposed on the average worker as a condition of survival. The fault with this aim is that certain groups of workers have pursued it at the expense of other groups, whereas it should be attained for all workers. Unless it is attained, decade after decade, the economic organization of society is at fault.

Productive Deficiency is not the Trouble

That it is possible to attain this aim with our present resources and without any change in human nature has been proved over and over again. During the World War, it was proved with such prodigal and conspicuous evidence that none were so blind as not to see it. Even with millions of able-bodied men withdrawn from productive effort by the Army and Navy; even with millions

of other workers diverted to efforts which, from the standpoint of society at large, were wasted; even with the resultant dislocation of industry; still, the workers who were left produced so much that they not only supplied the goods that were sunk at sea or otherwise destroyed in the conduct of war, not only supplied the Army and Navy and millions of people abroad, but had enough left to enable them to enjoy during the War at least as high a standard of living as before the War. And at the same time, they added far more to our capital facilities in various industries than we have since been able to use.

What a challenge is this to the imagination! Evidently within a single generation we could all but abolish poverty in this country, if we could keep at peace with the world and continue to use our resources, human and material, even as effectively as we have already succeeded in using them. Indeed, if the present income from property were maintained year after year, and distributed equally among the wage-earners, they would not gain so much thereby as they would gain in real wages if the productivity of the War years were maintained even for a generation. The possibilities surpass the goals of some of the socialist reformers.

That the incapacity of industrial society to create more wealth is not the reason why we produce so little is also shown by the heights which production has now and then attained even in time of peace. If business in the United States had been sustained at the level which it has actually reached from time to time, as shown in Figure 30,[1] a far higher standard of living would have been possible for the people generally than the people of any nation have ever attained. This picture shows at a glance that great material losses have resulted from industrial

depressions. The line between the dark area and the light area indicates fluctuations in the state of productive activity in the United States. The white area represents roughly the volume of production and employment; the dark area represents roughly the volume of unemploy-

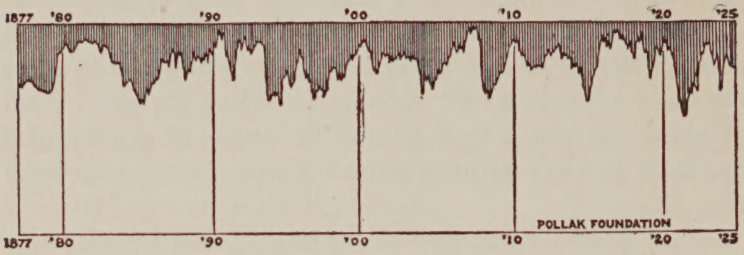


FIGURE 30. FLUCTUATIONS IN BUSINESS ACTIVITY, 1877–1925

ment and consequent loss in production. If the entire period had been as prosperous as its best years, the entire area would be white; the substantial economic losses represented by the dark area would have been avoided. Clearly, then, we have understated the case; for the 250,000 persons in the United States who have the largest incomes — and this includes all those who have taxable incomes of over $10,000 — do not receive an amount equal to the losses shown in Figure 30, losses due to our failure to keep business going at the rate which we have already demonstrated is a human possibility, with human beings as they are.

That a much larger volume of production is readily attainable is also shown by numerous scientific studies. The one conducted by the engineering societies under the direction of Herbert Hoover shows that our present resources would enable us to double the volume of production, provided both labor and capital could be sure of the one factor — adequate demand — which they now

have reason to fear will never last long. To double the output of each commodity and each service is, of course, neither possible nor desirable; but to double the output of goods in general, with the proportions largely determined as they would be in a profit economy by the free choices of the people, would be both possible and desirable. Indeed, such gains would be no more than enough to provide all our people with the minimum requirements for comfort, health, security and education. Any lower aim is indefensible. But, it may be said, the greatest need is not more goods but a better quality of goods. These two aims, however, can be reconciled; the people want and are perfectly able to produce better goods and more of them. Any consideration of recent advances in the arts, in the discovery of new resources, in power development, in scientific management, in the reduction of wastes, and in the application of invention to the processes of production, must make it clear that the progress of human knowledge alone, in the absence of anything to nullify its advantages, would make possible, decade after decade, more goods and better goods, and consequently far higher standards of living than have yet been reached.

Every Advance leads to a Recession

The chief nullifying influence is not, as it is often said to be, a conflict of interests between labor and capital. On the contrary, labor and capital agree on the aim — a higher standard of living. They agree on the prerequisite — increased production. They agree that the means are at hand, material and human.

Yet, as soon as there is any considerable progress toward the attainment of the aim, labor and capital alike make further progress impossible. Wage-earners, on their part, know that increased production is the neces-

sary basis of higher real wages, and that the way to increase production is to do their best, avoid waste, welcome every discovery and invention that increases output, and coöperate to the utmost with employers. Yet they know from experience — the bitter, recurrent experience of enforced idleness and the resultant suffering of hungry, ill-clad, ill-housed families — that at times the more efficiently they work, the sooner they work themselves out of their jobs. Producers, on their part, are just as well aware that they should constantly increase their output, and most of them are eager to do so. Yet they, too, know from bitter experience, some of them from losing all they have, that whenever they succeed as a body in largely increasing output, they overshoot the mark. The money is not at hand to take away the goods.

Confronted by this situation, labor and capital condemn each other. Workers complain of a conspiracy among producers to limit output, while producers complain that workers are conspiring for the same end. How long will they continue to blame each other? Probably until they discover that neither is especially at fault, since it is really the economic system, and not a fundamental antagonism of the interests of labor and capital, that automatically brings every forward movement to an end. Restrained by such a system, neither labor nor capital can continue to do what their common interest requires them to do. As producers, they cannot bring forth the volume of goods which as consumers they are eager to enjoy.

Why not? Exactly what is the cause of this anomalous situation? A simple answer must be inadequate, a sweeping conclusion indefensible; for, as we observed at the outset, the industrial world of to-day is far from simple. Its organization is intricate; its forces are many. There is

some truth in a score of answers to the question, and at least a grain of truth, no doubt, in a hundred more.[2] Each of these explanations has its place in a complete analysis of the causes of business depressions. Certainly a single cause cannot account for all our ills, nor a single remedy cure them. Furthermore, the necessary statistical basis for a fairly complete answer to the question is not yet at hand. On the basis of the available data, and within the confines of a single volume, the question can be answered only in broad outlines. Refinements, qualifications, exceptions — all the minor details — must be left for later studies. Still, we may possibly find the chief cause and the chief remedy if, with the picture of our pioneer before us, we hold fast to the truth that in our complex money and profit economy, as in his simple barter economy, the sole end of production is consumption. There are incidental aims, to be sure, such as improvement of the product, economy of effort, joy in the work and the welfare of the workers; but, with negligible exceptions, whatever the incidental aims may be, the end is always the using up of the product.

The Argument of Part V

In the remaining chapters we purpose to demonstrate three propositions: *First, there is no possibility of attaining the economic aim upon which all are agreed unless consumers somehow obtain enough money, year in and year out, to buy the goods about as rapidly as they are produced; second, the present money and profit economy does not enable consumers long to obtain the required money; third, there is consequently no possibility of sustained economic progress, and extreme alternations of prosperity and depression are inevitable.*

As these three conclusions seem to us to follow inevita-

bly from the analysis of the established economic system which we have already set forth in *Money* and, up to this point, in *Profits*, we do not see how any one who admits the truth of this analysis can logically refuse to accept our conclusions.

Yet most business men — including, no doubt, many of those who have followed us so far with complete assent — are not prepared to admit these defects in the financial mechanism of industry. They assume, on the contrary, that the right flow of money to consumers goes on 'automatically'; that in the very processes of financing increased production of goods, consumers 'somehow' receive the money wherewith to buy the additional goods. Thus they cling to the comforting conviction that the 'invisible hand,' to which Adam Smith attributed beneficent guidance, still automatically does about all that the common welfare requires. So they agree with the *Manufacturers' Record* in maintaining that 'economic law should be left to work out the movements of trade and commerce and business.'[3] Some business men, going a step farther, assume that since 'all trade is merely refined barter,' and is 'in the last analysis nothing but an exchange of goods against goods,' and since 'all the goods in existence are owned by somebody,' there must always be enough purchasing power in the hands of somebody to buy the goods.[4] We expect to show presently that all these assumptions are unwarranted.

In the first four Parts, we have explained the folly of seeking a better industrial order by means of revolution, and the necessity of preserving the foundations of our civilization. In particular, we have insisted that the profit motive, under such restrictions as may seem desirable, must be retained as an indispensable urge to sus-

tained effort; and that profits and losses and the so-called wastes of competition can be done away with only at the sacrifice of material progress and incidentally of consumers' freedom of choice. We have shown that, consequently, government regulation of prices, profits, and production, except in unusual cases, would badly serve the economic purposes of society; and we have shown, further, that some of the charges against the prevailing money and profit economy are based on superficial reasoning. This and much more we have said in defense of things as they are.

But all this, however sound, however important, does not dispose of the various counts in the indictment against 'capitalist civilization.' In no way does it relieve us of the necessity of putting our minds to the exacting task of finding out how we can so modify the existing price and profit economy as to enable labor and capital to achieve the economic aim of society. In no way does it refute the final charge that the present system is a seriously defective means of producing and distributing goods. That charge is, indeed, well founded since, as we shall endeavor to show in the following chapters, the system itself, far from automatically maintaining the required flow of money to consumers, normally and persistently, decade after decade, fails to provide consumers with enough money to acquire the goods which they are perfectly able and willing to produce.

CHAPTER XXI

ADEQUATE INCOME FOR CONSUMERS THE CHIEF NEED

SINCE the end of all economic activity is consumption, money spent by consumers is the force that keeps the wheels of industry moving. Current consumption is the chief incentive to current production; deficiency of current consumer buying is the chief cause of unemployment. Failure of consumers to buy spring goods checks the production of fall goods, not only because it dispels confidence, but also because it ties up capital. In other words, production looks for its regulator to distribution; and distribution in turn is regulated by the flow of money through consumers' markets. This flow of money, therefore, is the most fundamental of the many factors that have a part in business fluctuations — chief among the many factors that help or hinder our complex industrial society in its efforts to attain its chief economic aim.

In all this, let us note again, our modern money and profit structure is in marked contrast with our pioneer community. In that simple economy, men never were forced to stop working because they had produced more than they could use up; whereas in our complex economy, millions of men have to stop working every now and then because no way has been found of using up what they have already produced. Formerly, production regulated consumption; now, although consumption is still limited in the long run by production, consumption itself regulates production. In our day, consequently, we can continue to raise the standard of living only so long as increased per capita production induces a flow of money to

consumers sufficient to enable them to buy the increased output; *sufficient, that is to say, to buy the increased output, without a fall in the price-level.* From now on we shall have much to say about adequate consumer purchasing power. Always we shall mean a flow of money sufficient to buy the output of industry *at the prevailing general level of prices.* We here make that qualification once and for all.

When consumers receive enough money to take away the output at the rate at which it reaches the markets, business proceeds steadily. Then, ordinarily, finished goods are used up as rapidly as they are ready for use, which fact is in itself sufficient to bring about production on an even larger scale. But when, as in 1916–20, the flow of money is more than enough to take away available supplies at current prices, prices rise and business rushes forward; and when, as in the latter part of 1920, the flow is not enough, prices fall and business slackens. In short, to move commodities year after year, as they must be moved if productive activity is to be sustained, enough money must be spent by consumers, and not much more than enough, to match all the commodities, dollar for dollar. Otherwise, there is sure to develop presently either a glut or a shortage, a resultant change in the price-level, a recession of business, and a consequent failure of society to achieve its economic aim.

Under a money and profit economy, therefore, no influences can continue to bring about marked fluctuations in the state of business activity, unless they change the relation of the amount of purchasing power spent in the consumption of commodities to the output of commodities.

The flow of money to consumers depends mainly on productive activity; but productive activity depends

mainly on the flow of money to consumers. Where are we to break into this circle in order to find the place where influence should be brought to bear to sustain prosperity? Evidently, wherever we can increase consumer demand; for if we increase productive activity without proportionately increasing the flow of money to consumers, prosperity is short-lived; but if we increase the flow of money to consumers in proportion to increased productive activity, prosperity can continue.

The Mental Attitude of Producers is Secondary

This is contrary to all the theories that ascribe business cycles mainly to states of mind. It is at variance with the widespread belief that if a sufficient number of people talk prosperity with sufficient enthusiasm, they can bring on a commercial revival that will be sustained by its own momentum. This sunshine cure for business anæmia is a quack remedy, because it takes no account of the function of the buyer in stimulating business and the only conditions under which he can continue to buy. Artificial respiration cannot keep the patient alive indefinitely. Neither can a spirit of optimism long create or sell commodities; of itself it cannot operate a blast furnace or take shoes off the retailer's shelves. It must first put enough money into consumers' hands. Indeed, to persuade business to prepare for an effective consumers' demand that is not forthcoming merely makes matters worse.

At certain times, it is true, business is not unlike a machine on a dead center: once started by a push from the outside, it can go on for a while by itself. But it can do so only when something more substantial than the booster's spirit has increased consumers' purchasing power. At best, optimism can do no more than start a forward movement a little earlier than otherwise it would

have started. Business cannot run on optimism; reactions soon occur unless expectations are justified by sales. A self-starter may save time in starting an engine, but only a steady supply of gasoline can keep it running. Sunshine campaigns may start business, but only consumers' dollars can sustain it.

It is true that confidence and rising prices and increased purchasing power have intricate causal relations; each sustains the others and is sustained by them.[1] It is easy, however, to overestimate the importance of confidence. Confidence cannot continue to increase the purchasing power of consumers if the gold reserve, or the financial policies of corporations, or any other cause checks the growth of the volume of money in circulation. Indeed, even when the volume of money is expanding, confidence cannot enable consumers to buy an ever-increasing output, when industry fails to disburse money at the same rate. In short, prices and confidence *cannot* rise far without the support of continued increases in consumers' purchasing power; but continued increases in consumers' purchasing power *can* continue to lift the levels of prices and confidence.

At times, no doubt, confidence in the business outlook does bring about immediate additions to consumer income. For confidence leads to the expansion of capital equipment and of output, to the accumulation of commodities in all stages of production, and to forward buying and the stocking of shelves, all of which immediately adds to the income of consumers without immediately appearing to result in overproduction. For a while, therefore, business is good; but this kind of prosperity cannot last long because, as we shall see, its own financial processes do not yield consumers enough money to buy the resultant output.

The Mental Attitude of Buyers is Secondary

All this is contrary to the popular view that changes in the mental attitudes of consumers have as much to do with trade recessions as changes in consumers' incomes. The cause of the depression of 1921 in the United States, according to a common view, was a 'buyers' strike' among consumers against high prices; but sufficient evidence to support this view is lacking. The theory fails to explain why buyers did not 'strike' in 1919. Were they satisfied at the end of 1919 with prices eighty-five per cent above the pre-War level, but outraged six months later because in the meantime prices had risen about ten per cent? This does not sound reasonable. The 'buyers' strike' explanation does not explain what we are most eager to understand; namely, why the depression came precisely when it did come. Nor does this theory explain what became of all the money that the outraged buyers are said to have withheld from the market. Are we to suppose that they carried it in their pocketbooks in addition to the usual amounts? Only a small part of the depression could be accounted for in this way. Nor can we accept the theory that the dollars which were refused to merchants were turned over to banks. This explanation fails us because in 1920 and 1921 savings bank deposits and total individual deposits did not increase at an unusual rate. (See Figures 47 and 48.) The only convincing explanation is that consumers failed to buy because they lacked the money wherewith to buy.

No doubt some people with funds at hand refused to buy merely because prices seemed to them too high; but their refusal was a minor factor in the markets, and was insufficient to bring on a depression, as long as consumers' incomes were large enough to take away current production at prevailing prices and there was a widespread

belief that prices would be still higher. What happened in 1920 and 1921, then, was not a consumers' strike. People who want to buy and have no money should be compared with the unemployed rather than with strikers.[2]

It is true that the disposition of people to save would cause a shortage of expenditures in consumer markets, even if the flow of incomes exactly kept pace with the flow of goods. This difficulty we shall consider presently. In our view, however, individual savings are only a minor factor in business recessions. We maintain that the wants of most people grow as rapidly as their incomes, and that most people are disposed to increase their expenditures about as rapidly as their incomes will permit.

Conclusion

In short, the one thing that is needed above all others to sustain a forward movement of business is adequate consumer purchasing power. With our financial world as it is to-day, let it be known that there will be consumers with money to spend for any known and producible goods, at prices sufficiently high to warrant production, and the goods will be produced. Give consumers the money, and organized business will look out for the rest. There will be no shortage of money on the producing side; the credit and investment world is always able and eager to take care of that. A willing buyer does not have to wait long, but a willing seller may have to wait forever.

CHAPTER XXII

THE UNIVERSAL FEAR OF A DEFICIENCY OF CONSUMER PURCHASING POWER

WHETHER or not a limited market — a failure of consumer demand to keep up with production — is, indeed, the fundamental cause of our failure to achieve the economic aim of society, the conviction that this cause is operative prevails throughout the world. Here is a point upon which capitalists, laborers, and statesmen fully agree. Indeed, the political as well as the commercial policies of all the leading industrial nations seem to be based on the belief in a limited market, a market which cannot possibly expand rapidly enough to absorb all the enjoyable things which the world is able and eager to produce, a market so deficient in buying capacity that wars have been inevitable.[1]

How different from the primitive community with which we started our discussion! This fear of general overproduction — we say it again, even at the risk of tiresome repetition — did not arrest industry, until industry had developed the distinctive features of our modern money and profit economy. Not for a moment was productive activity restrained in our simple pioneer community, for fear that no way could be found of consuming the goods.

The present universal belief in a limited market is well expressed by Herbert Hoover, Secretary of Commerce: 'I believe,' he says, 'that we have to-day an equipment and a skill in production that yield us a surplus of commodities for export beyond any compensation we can usefully take by way of imported commodities. . . . There

is only one remedy and that is by the systematic, permanent investment of our surplus production in reproductive works abroad. We thus reduce the return we must receive to a return of interest and profit.'[2] Carter Glass, former Secretary of the Treasury, also ascribes our troubles to the incapacity of home markets to absorb our output. During the depression of 1921, he says, 'building was reduced to a minimum, road construction was stopped, furnaces from one end of the country to the other were banked, unemployment to a frightful extent ensued; and all this for no lack of credit facilities, but for lack of markets in which to sell the products of farm and mill and factory.'[3]

Prosperity always brings Fear of Depression

Business men are always on the lookout for just such a collapse. Some of them seem to think that periodic depressions, like the movements of the heavenly bodies to which they are sometimes attributed, are foreordained. Indeed, no matter how widespread and indisputable the forward movement may be, no matter how favorable all the conditions may be which are commonly regarded as fundamentals, nevertheless nearly everybody looks for a recession.

Early in 1925, for example, the whole economic situation was thought to be remarkably sound. Never before, it was agreed, had there been a more promising combination of the factors that are said to make for prosperity. The political situation was gratifying; business seemed assured of four years of comparative freedom from Government interference. The agricultural depression was over, and the buying power of farm products was almost exactly right for a balanced condition of the industries. Commodity stocks were not excessive; there had been

little forward buying. The European situation was much better; the railroad recovery was remarkable; there were no unusual labor troubles; capital equipment was greater than ever before; and the volume of production was steadily increasing. Most important of all, there was abundant bank credit at low rates, and there were gold reserves in super-abundance. Business men generally could not see a cloud in the skies. And yet economists, bankers, trade journals, and statistical agencies with one accord warned the business world to be prepared for a setback; not merely — let us note carefully — because they feared that there would be overproduction of this or that, but because they feared overproduction in general.

And apparently their fears were well grounded. During the following months the dominant question among business men was this: Why, in spite of all these favorable conditions, are consumers buying so little? Various answers were offered on every hand, answers that explain nothing: President Coolidge had made the mistake of urging the people to economize; banks were hoarding money; there were too many automobiles; there was too much speculation in stocks; consumers had been too extravagant in the past; the upward turn of the business cycle had run its course; and so on, with all the other theories that are gravely expounded and naïvely accepted whenever business slows down. Until the real cause of a solar eclipse was discovered, the wrath of the gods was considered a sufficient explanation.

In the spring of 1925, no sooner had the various indexes of general business activity in the United States passed above normal, and the index of production considerably above normal, than a halt was predicted. 'Business,' said the forecasters, 'appears to be in the attitude of waiting for developments which will disclose an increased con-

sumptive demand. . . . The resistance of ultimate consumers to high prices continues an outstanding feature.'[4] 'No one, except the professional optimist,' said Edward Filene at about this time, 'feels very hilarious about the business outlook. And, unfortunately, the optimist's "silver linings" cannot always be minted into coin and credit tokens. But why — with so many signs of economic soundness all about us — are we going to have such a difficult time? The answer is plain enough to be read on the run. Most of our trouble grows out of the fact that we are unable to export our surplus goods in anything like an adequate volume.'[5] Here, again, we have an expression of the settled conviction of business men. It is not merely that they fear relative overproduction of this or of that — though such maladjustments are always liable to occur — but that they fear an overproduction of goods in general, an output not merely beyond the buying capacity of consumers at home, but beyond the buying capacity of the world.

Naturally, then, although everybody agrees that the economic aim of society is increased production, yet the very fact that society is beginning to succeed is regarded by everybody as infallible proof that it is about to fail. If the country is producing steel at ninety per cent of capacity, this is considered a sign of impending trouble. One statistician even declares that a rise in the number of blast furnaces in operation above a certain per cent invariably forecasts a recession in business.

No wonder, then, that the decline in basic output from twenty per cent above normal in February of 1924, to seven per cent below normal in June, was generally regarded as beneficial. 'This curtailment,' said *Trade Winds*, 'was a healthy corrective of the threatened overproduction of last spring.'[6] Why a healthy corrective?

Does this mean that the country already has all the bridges and subways and roads that it needs? Does it mean that all the houses are adequately heated and the farmers supplied with all the tractors that they can use to advantage? Evidently not. What, then, do our statesmen mean by a surplus of commodities for export beyond all the commodities we can usefully take in exchange? How can they ascribe all our economic distress to 'a lack of markets'? We must reach out to the ends of the earth, they tell us, in order to find enough consumers to relieve us of our superabundance. Does this mean that everybody at home is adequately fed and clothed and housed? Far from it. Why, then, should we not seek a market among the millions of farmers at home who lack the ordinary comforts of life, and among the hungry hordes in our congested city districts? Here, surely, would be an unfailing market for our 'surplus' goods, provided — here and here only is the crux of the trouble — provided the process of producing the goods yielded to consumers automatically, as it is supposed to do, the money wherewith to buy the goods. But it does not. And this is cause enough for the persistent complaint of a lack of markets. Our own consumers do not, in fact, receive nearly enough money to buy all the goods which they want and which they are perfectly able to produce.

'Of course not,' somebody is sure to exclaim; 'how can we ever expect every ne'er-do-well and spendthrift to have enough money to buy everything he wants?' But this objection, as most readers see at once, slips by the point. Not until every one has an Aladdin lamp can every wisher have everything he wishes for. That, however, does not worry us. We are not even expressing our concern at this moment because some people can buy far too little and others far too much; though that situation

is so unfortunate that, next to the matter before us, there is no more important economic problem. The way to a more equitable distribution of income, however, will be much easier to find, once the way has been found to make the totality of income sufficient. What concerns us here, therefore, is the fact that all the wishers in the world put together have not enough income to continue to buy the wealth which, without the magic of even one fairy lamp, these very wishers could readily produce, or even the wealth which at times they actually do produce. Consequently, wishing is in vain; the vast wealth which might be produced decade after decade is not produced at all, and nobody gets it.

Capital, Labor, and the State fear Overproduction

Convinced that the markets cannot absorb all that could be turned out, individual employers, as we said at the outset, often have no choice; they must curtail production. Laborers, as well, convinced that the more productive they are, the sooner they will be out of work, contrive by various means to limit output. Other motives, it is true, prompt them to slow down; but the dominant motive is the fear that the markets cannot take all that can be produced at prices which will make it possible for employers to continue to turn out goods. Wherefore, with unemployment looming up before them, laborers resort to rules, intimidation, and various other devices of sabotage or 'ca' canny,' in order to postpone what appears to be the inevitable glutting of the markets. To what extent this reasoning of employers and workers is unsound and their practices folly, we are not for the moment considering. We are merely calling attention to the fact that they agree upon the necessity of taking measures to avoid overproduction.

Not only do labor and capital thus combine in every great industrial nation to declare their belief in a limited market, but the nations themselves, in their commercial rivalries, their protective tariffs, and their struggles for trade concessions, also show their fears that the markets of the world cannot absorb all that the world can produce. This is, at bottom, the meaning of Germany's insistence, at the outbreak of the World War, that she must have 'a place in the sun.' If there were any guarantee in money markets, as there is in barter markets, that world demand would approximately equal world supply, and if each nation accordingly endeavored to send abroad only what it could produce to the greatest advantage, in order that it might receive in return as much as possible of what other nations could similarly produce, there would be no occasion for this bitter, international struggle for markets. Exchange would take place naturally among nations, to their obvious, common advantage. But when the buying power of the world is far below the world's productive capacity, 'cut-throat' competition, leading again and again to war, is the inevitable result.

Thus capital, labor, and the State, each in its own way, and each with only the vaguest ideas concerning the cause of the trouble, expresses its conviction of a limited market.

CHAPTER XXIII

THE CIRCUIT FLOW OF MONEY AND THE ANNUAL EQUATION

THE processes which bring about this deficiency in consumer purchasing power are intricately involved in the financial mechanism whereby goods are now produced for sale at a money profit; they are purely money and profit phenomena; they had no part, as we have seen, in the simple community in which our pioneer produced and bartered goods.

In the next seven chapters these processes are studied in detail. By an examination of corporation balance sheets, both real and hypothetical, involving various uses of profits, an attempt is made to show how the financing of increased production out of profits, and the savings of individuals and of corporations, bring about a flow of finished goods during a period of prosperity in excess of the flow of consumer income, and thus bring prosperity to an end. Any one who is already convinced that this is what happens and who does not care to read our extended analysis of the processes, will find our conclusions in the closing chapter.

To discover how this deficiency is brought about, one must first understand the characteristics of the circuit flow of money from consumers, through the hands of profit-making producers, back to consumers, and the conditions which must prevail if consumers are to obtain enough money to buy the output of industry at the rate at which it reaches the markets. These matters are discussed at length in the chapters of *Money* entitled 'The

Circuit Flow of Money' and 'The Annual Production-Consumption Equation.' An outline of these two chapters is here offered for those who want it; others may omit this summary by turning at once to the following chapter.

The Annual Production-Consumption Equation

Since the using up of goods by final consumers is the end of industry, production must slacken, and thus render increased consumption impossible, unless products find their way to consumers about as rapidly as they are produced. This condition prevails, obviously, as long as there is close and continuous correspondence between the dollar-sales of consumers' goods and the output of these goods measured in dollars at prevailing prices. In other words, business as a whole is sustained as long as people continue to use up commodities at the rate at which they are being prepared for use.

But this unqualified truism does not explain business depressions. It goes without saying that in the course of time men use up nearly all that they produce, and no more. If we take into account a sufficient number of years, it is true that 'goods cannot be sold for consumption more rapidly than they are produced.'[1] But time is the essence of our problem. For a time goods certainly can be sold for consumption more rapidly or less rapidly than they are produced. To keep business free from extreme fluctuations, production and consumption must balance within a sufficiently short period of time.

But what is a sufficiently short period? For our present purposes, we need not be more precise than to say that variations in the state of business activity will be slight if the desired balance occurs within twelve months. Nature is responsible for an annual business cycle. Because of seasonal fluctuations, both in production and

consumption, from which there is no escape, the cycle of the year is the shortest period of time within which we may reasonably hope to approach closely to a balance of output and demand. This balance we may call the annual production-consumption equation. For convenience, we may call it simply the annual equation.

Overproduction

It is with reference to this equation that the term 'overproduction' has its chief meaning. As there is no known limit to human desires, it is not possible to turn out goods in general over and above the *wants* of mankind. Nowadays, the term 'overproduction' is seldom used in this sense either by business men or by economists, for they are well aware that capacity for consuming with satisfaction has always kept far ahead of capacity for producing.

The traditional argument against the possibility of overproduction, though it does not err in using the term with reference to human desires, makes an error which is more serious because more subtle. How absurd it is — so runs the argument — to imagine that the supply of goods can possibly be greater than the demand for goods! As a matter of fact, demand and supply are one and the same thing. Is it not clear that when I drive to town with a load of hay, the hay is my demand for goods and at the same time another man's supply? I have added to demand and to supply exactly one load of hay; the balance between supply and demand remains precisely what it was. To be sure, I may sell the hay for money and then spend the money at the harness shop; but I must not allow the fundamental nature of the transaction to be obscured by a mere medium of exchange. I have only to imagine a state of barter to see clearly that nothing really

matters in this transaction except its two commodity ends. I disposed of a load of hay; I acquired a new harness; what the intermediary happened to be is of no consequence. It is true that there may be a distressing lot of hay in the market, while harnesses may be comparatively scarce. In that case, there has been a *relative* overproduction of hay; but obviously not all goods can be *relatively* overproduced. Consequently, there can be no such thing as general overproduction. This argument is typical of the errors that men fall into when, disregarding the essential difference between barter and money markets, they focus their attention on goods and overlook the 'mere medium of exchange.'[2]

That not all goods can be overproduced in relation to each other is an axiom. If, therefore, we follow the instructions of some writers and consider nothing but goods, the idea of general overproduction seems absurd. If, on the other hand, we consider all that may happen to the medium of exchange, we see at once that there may readily be a general overproduction of goods in relation to the money which consumers offer in exchange for goods. That is to say, the annual equation may be upset. As a matter of fact, every recession in business activity is marked by this kind of overproduction or by the fear that it is imminent. Of this there can be no doubt. But the fact that this deficiency of purchasing power is, as we believe, the chief cause of our failure to sustain prosperity, remains to be demonstrated.[3]

The Circuit Flow of Money

In any event, production cannot long be increased without a proportionate increase in consumer expenditures. The volume of these expenditures depends mainly on the size of consumers' incomes, and the size of these

incomes depends, in turn, mainly on the total volume of money in circulation. But this is not the only factor. The size of consumers' incomes is also determined in part by the frequency with which money, once spent in consumption, is returned to consumers; that is to say, the average time taken by money to make the circuit from expenditure by consumers, through various other uses, mainly in connection with the production of goods, back to another expenditure by consumers. This flow of money, therefore, from use in consumption to another use in consumption should not be overlooked in studies of the causes and conditions of business fluctuations and of the means of reaching higher standards of living. What we have come to call the business cycle is a composite of many cycles — cycles of wage-rates, wholesale prices, farm rents, profits, volume of production, growth of capital facilities, and so on. Among these periodic movements are variations in the circuit flow of money.

There are streams of commodities and streams of money which in a literal sense are constantly, though not steadily, moving in opposite directions. For the most part, raw materials are grown, extracted, and graded; moved on to factories and prepared for final consumers; moved on to wholesalers; thence distributed to retailers; and finally turned over to consumers. At the same time, streams of money are moving in the opposite direction — a main stream becoming smaller and smaller as it flows from consumers to retailers, from retailers to wholesalers, from wholesalers to manufacturers, from manufacturers to producers of raw materials, and thence, mainly in the form of wages, back once more to consumers. This circuit movement characterizes the flow of money, but not the flow of commodities; for when commodities get into the hands of consumers, they are usually disposed of, and

thus withdrawn forever from the stream, whereas most of the money that reaches consumers is, on the contrary, invested or paid by them to retailers and to others, and thence proceeds around the circuit.

This stream of money from use by consumers in the purchase of new goods back to another use by consumers in the purchase of new goods, we call the 'circuit flow of money.' [4] The rate of flow we call the 'circuit velocity of money.' By that term we do not mean what economists call the 'velocity of money,' namely, the frequency with which money is used for any purpose whatever. We are distinguishing between the velocity of money in general and the velocity of money that is used in the purchase of goods for consumption. This distinction — though rarely, if ever, made — is important. When, for example, bank deposits are turned over more rapidly in connection with increased sales on the stock markets, there may or may not be — probably never is — a corresponding change in the turnover of bank deposits used to pay for consumers' goods. Nor is money spent more frequently in retail markets merely because it is spent more frequently in wholesale markets; money may work faster in order to pass wool and woolen goods through more hands on their way to clothiers' shops, without passing more wool through warehouses and more garments through the shops. This is, in fact, what happens as prices rise and speculation in commodities becomes profitable; additional middlemen make use of money without making additional sales to consumers.

It follows that both velocity and quantity of money might remain constant — that is to say, people might have the same amount of money and spend it as rapidly as ever — and yet the markets might sense trouble. For if people decreased the amount spent for new goods within

a given period of time, and to the same extent increased the amount used in other ways, they would thus decrease the circuit velocity of money; and they might thereby temporarily depress business, without decreasing the velocity of money. Under certain conditions, therefore, the turnover of money as a whole may have less to do with business fluctuations than the turnover of money in its particular function of moving goods into the hands of consumers.

Diagram of the Circuit Flow of Money

The diagram on page 255 represents, in a general way, the circuit flow of money. In the main, subject to the qualifications made in *Money*, this diagram shows what the flow would be if business were perfectly stable.[5]

The double reservoir at the top shows the amount of money in the hands of individuals and available for expenditure in consumption. The reservoir is divided into two parts, in order to represent the fact that a part of the money received by individuals is income, most of which is spent in consumption; while a part is money received from matured insurance policies and from the sale of real estate, bonds, and stocks, most of which is reinvested. The two parts of the reservoir, however, are connected with pipes, in order to take account of the fact that some income is invested, and some money received from the sale of securities is spent in consumption. These connecting pipes are important. We must bear in mind that they are always partly, and never wholly, clogged. By their aid we may remember that we have no means of knowing how much of consumers' incomes actually will be spent in consumption in any given period of time.

Into the right-hand section of the consumers' fund, three large pipes are emptying: one represents the large

proportion of individual incomes which is derived from personal services; the others represent the smaller proportion which is derived from management and property, including rentals, royalties, interest, and dividends.[6] The sizes of some of the pipes in the diagram are based, necessarily, on rough estimates, for no dependable study has yet been made of the proportions of individual incomes which are used for new commodities, services, real estate, and investments.

Leading out of the reservoir of consumers' incomes are various pipes which represent expenditures for rent, taxes, clothes, food, sundries, and wages. The relative estimated amounts spent for these purposes are indicated by the size of the pipes. It will be observed that most of the individual incomes are paid at once to those who are engaged in the distribution of finished commodities. These distributors, in turn, pay much of the money they receive directly to manufacturers, who, in turn, pay much of the money they receive directly to producers of raw materials. All along the way some of the money, mainly in the form of wages, profits, and interest, gets into the hands of individual consumers; and part of this, *but only a part*,[7] is spent for consumers' goods, thus completing the circuit flow.

Some of the money completes the circuit quickly, some of it slowly. That part which is spent for personal services is passed directly from one consumer to another. Most of the money spent by consumers, however, takes a longer course before it finds its way back to consumers. Part of the money that is spent for a pair of shoes, for example, goes to the wholesaler; part of that money goes to the manufacturer; part of that money goes to the tanner; part of that money goes to the rancher; part of that money goes to the producer of harvesting machinery;

THE CIRCUIT FLOW OF MONEY

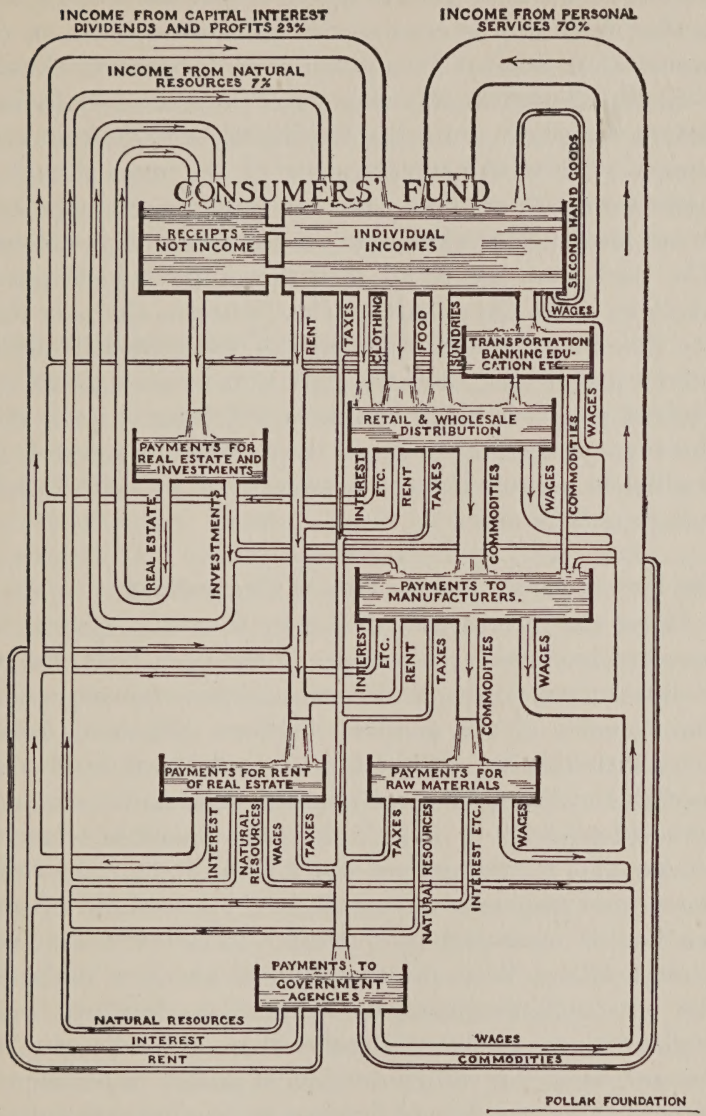


FIGURE 31. CIRCUIT FLOW OF MONEY

part of that money goes to mechanics in the factory, and is thus returned to consumers. In a sense, most of the money that is spent for a given pair of shoes has already been distributed in this way since costs are usually met before the goods are sold. During the circuit from consumer back to consumer, some of the money that is spent for a pair of shoes passes through more hands than in our illustration; some of it passes through fewer hands. The part that the retail shoe dealer pays in wages is likely to make the circuit quickly, whereas the part that the shoe manufacturer disburses as dividends is likely to take a longer time, and the part that is set aside as undivided profits is likely to take a still longer time. It is the average time taken by all the money in the flow from one use in consumption to another that we call the 'circuit time of money.'

The Flow of Money and the Flow of Commodities

Upon the rate of flow of money into the reservoir of personal incomes largely depends the even flow of commodities from producer to consumer and the consequent maintenance of the annual equation. Whatever interferes with this stream tends to retard the flow of commodities and thus to disturb business. Sometimes money gets sidetracked in hoards, in cash balances, even in banks, and is unemployed for an unusually long time. Sometimes consumers' incomes are increased out of proportion to increased production. At other times, not enough money flows into consumers' hands to maintain the production-consumption equation; finished commodities increase more rapidly than expenditures. In general, whatever causes the flow of money to consumers to lag behind the flow of finished commodities interferes with further production.

Business stability, then, as far as it depends on money, is concerned primarily with the rate of flow of money into consumers' hands. It does not necessarily make any difference how much money is in Government vaults, or is frozen in loans, or is idle in hoards, or is carried in pockets and tills or in bank balances, provided the volume of money thus withheld and the volume of commodities coming upon the markets remain the same from day to day. Only changes count.

Factors that alter the Circuit Time of Money

Our next question is: What factors retard or accelerate the flow of money from consumer back to consumer? This question would not concern us if money actually flowed through the channels of commerce as steadily as in our diagram. Here we have pictured all the pipes as unobstructed, unvarying in size, free from leaks, and without sources of additional supply. If the circuit flow of money were such, day in and day out, that we could accurately represent it by means of such a simple and static picture, and if the flow of commodities were equally steady, industry would be perfectly stable. There would be no business cycles. But money never does flow through the arteries of trade as steadily as this, and variations in the rate of flow come more rapidly in some parts of the circuit than in others. These facts might be suggested by means of gate-valves in all the pipes, subject to the control of governments, corporations, and individuals. Nothing but a motion picture, however, could show all these multifarious and kaleidoscopic changes. So it is only in a general way that our simple diagram can help us to visualize the major movements. Not until we consider in what specific respects this diagram fails to depict what actually happens to money during the circuit, are

we prepared to consider the means of maintaining business stability and the annual equation.

Perfect Stability Unattainable

Perfect stability is unattainable since few of the various factors that cause instability are subject to complete social control. Ripples on the business seas there will always be, even if there are no billows. An exact production-consumption equation, a balanced condition of the industries, a circuit flow of money perfectly adjusted to the flow of finished goods — this goal society can never reach. Maladjustments are inevitable, if for no other reason, because consumers have freedom of choice. At best, individual producers cannot be fully informed concerning demand; and even if they knew all about consumers' present desires and buying power, and all about the schedules of other producers, and all about the weather in the coming season, and even if they planned accordingly, and even if they succeeded in carrying out their plans — all of which is impossible — still, production would be unbalanced, because both the desires of consumers and their effective demand would change before the goods could be placed on sale. At any one time, consequently, there is certain to be relatively too much of this in the markets and too little of that, as well as the far more serious condition of too large or too small a total volume of goods in relation to total consumer demand.

It is fortunate, therefore, that an absolutely stable price-level, an unalterable flow of money, and a perfect balance of production and consumption are not essential to sustained prosperity. If the approach to these ideals were as close, decade after decade, as it was in 1911–12, for example, and if the business world had reason to ex-

pect it to remain so, this would be sufficient for all practical purposes. This would enable society to achieve its economic aim. So, throughout our discussion we are not speaking of abstract ideals, unattainable among human beings as they are, but only of such close approximations to ideals as have at times actually prevailed.

Our diagram of the circuit flow of money, as we have said, is too simple to show all that happens to money on the way from consumer back to consumer. The failure of the diagram is most serious in three respects: It takes no account of the influence on the circuit flow, of savings, profits, and changes in the volume of money. In *Money* the discussion of these three factors could not go far, for want of the necessary background; but now, against the background of the preceding chapters of this volume, it is possible to examine in considerable detail the effects of savings, profits, and changes in the volume of money on the circuit flow, and consequently on sustained business activity.

CHAPTER XXIV

CORPORATE INCOME AND THE ANNUAL EQUATION

LET us now, therefore, in our attempt to find out what causes the inadequacy of consumer demand and the resultant decline in business activity, take due account of the fact that every community must save. Concerning that fact, at least, there is no disagreement. From the points of view of the individual and of the corporation, as well as from the point of view of society, savings are absolutely necessary. The individual must save to provide for sickness, old age, dependents, and unemployment; and the corporation must save, if for no other reason, to protect itself against future losses. Society as a whole must save in order to attain its economic aim; for if a higher standard of living is to be achieved for a given population, or a given standard of living maintained for a larger population, savings must provide increased capital facilities.

Every year, in fact, an important part of the national income is saved. The percentage, however, varies from year to year, and there are also marked fluctuations from year to year in total savings. All these facts are depicted in Figure 32. The question we purpose to consider in this chapter is whether the part of these savings which is made by corporations has anything to do with deficiences in consumer purchasing power.

Corporate Savings

Leaving for later consideration, then, the savings which are made by individuals and by the State, we may first

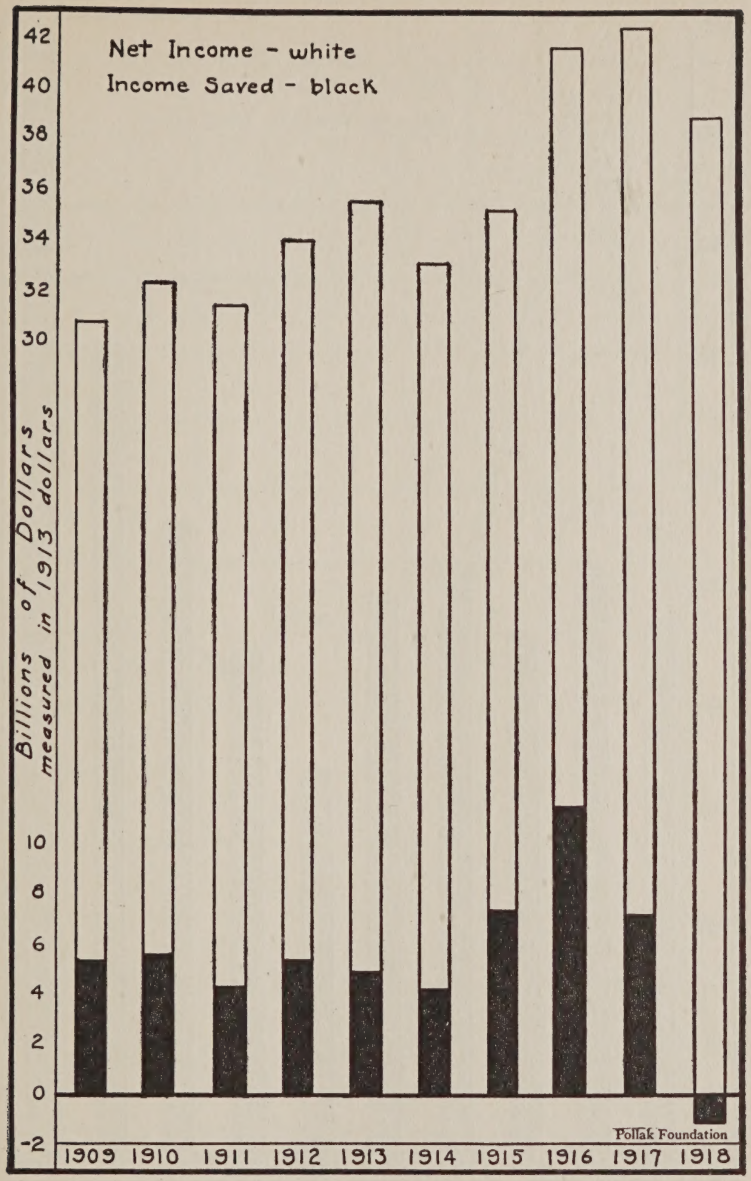


FIGURE 32. NATIONAL INCOME AND INCOME SAVED, 1909–18, MEASURED IN 1913 DOLLARS

(Statistics from Willford I. King, 'The Net Volume of Saving in the United States,' *Journal of the American Statistical Association*, December, 1922; p. 467)

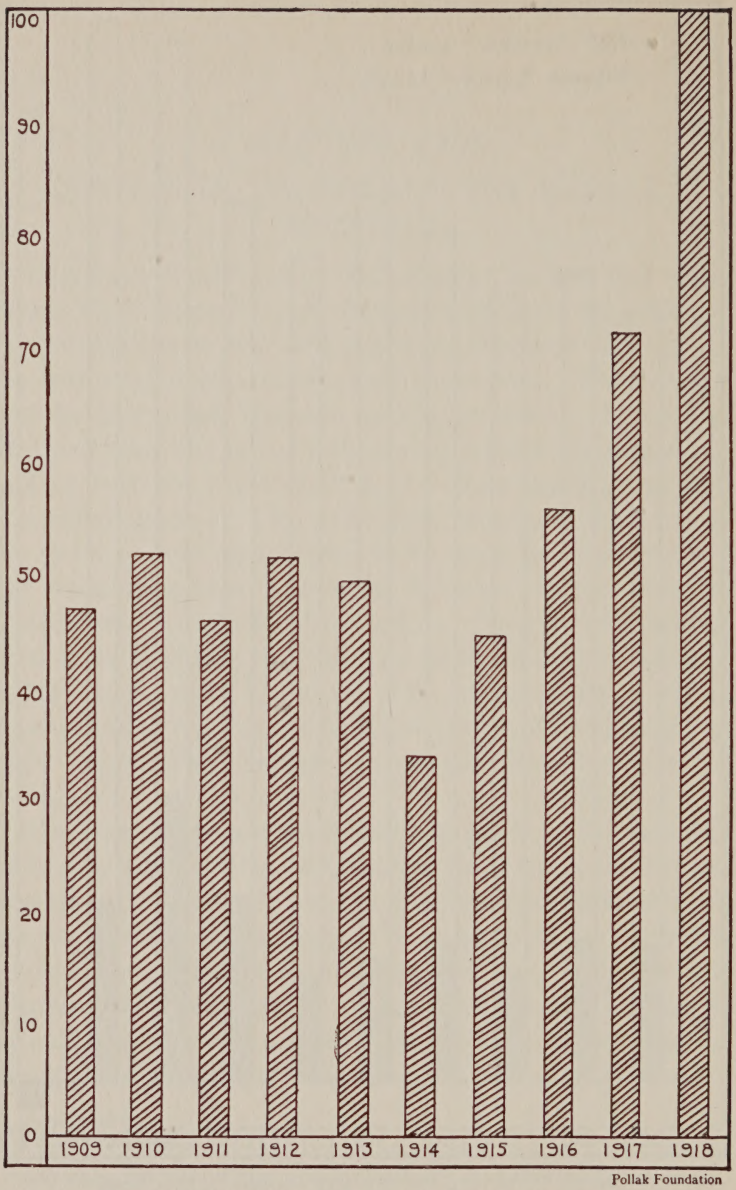


FIGURE 33. PERCENTAGE OF TOTAL SAVINGS SAVED BY BUSINESS CONCERNS, 1909–18

(Statistics from Willford I. King, 'The Net Volume of Saving in the United States, *Journal of the American Statistical Association*, December, 1922; p. 470)

FIGURE 34. TOTAL SAVINGS COMPARED WITH TOTAL BUSINESS SAVINGS

(Statistics from Willford I. King, 'The Net Volume of Saving in the United States,' *Journal of the American Statistical Association*, December, 1922; p. 470)

consider corporate savings. In the years just before the World War, as Figure 33 shows, corporate savings in the United States accounted for about half the total savings. Figure 34 shows, in billions of dollars, the total savings of the Nation, from 1909 to 1918, compared with total corporate savings. It should be noted that, even before the period of War profits and War inflation, corporate savings averaged well above two billion dollars a year.

Indeed, as we have shown in Chapter XIII, corporations in the United States, taken as a whole, distribute as dividends only about half their profits. To plough the rest back into the business is, as the Chancellor of the British Exchequer and the head of the largest bank in the world once remarked, an established and approved policy. 'A growing business,' he declared, 'and at every period it is upon the growing business that the progress of the future depends, is one in which a large part of the profits each year are saved and put back into the concern.'[1]

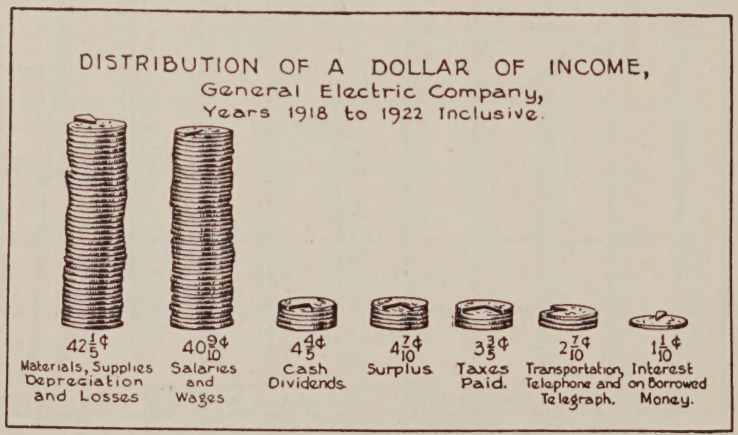


FIGURE 35. DISTRIBUTION OF EACH DOLLAR OF INCOME OF THE GENERAL ELECTRIC COMPANY, 1918–22

Exactly what is meant by corporate savings may be shown by means of concrete cases. The savings of the General Electric Company, for example, from each dollar of income are all covered by the item of 'surplus' in Figure 35. This accounts for 4.7 cents out of every dollar of income. The other 95.3 cents, as an examination of the various columns will show, are not saved. They are so distributed that they *may* reach consumers and be spent for goods before they are again used to produce goods. It is the undistributed 'surplus' of 4.7 cents — the corporate savings — with which we are here concerned. Similarly, as Figure 36 shows, Swift and Company disburses the money received on sales of beef, pork, and mutton, in ways which make it possible for nearly 98 cents out of each dollar to be used next in the purchase of consumables. The question before us is whether the company uses that part of the 2 cents of profit, which it does not distribute as dividends, in ways which cause deficiencies in consumer purchasing power.

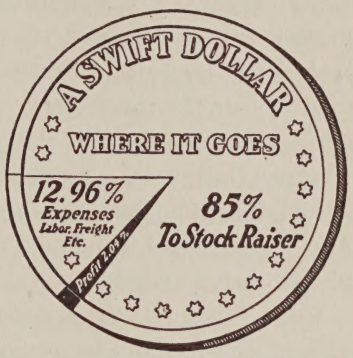


FIGURE 36. DISTRIBUTION OF EACH DOLLAR RECEIVED BY SWIFT AND COMPANY ON SALES OF BEEF, PORK, AND MUTTON

In any event, there are no devices whereby corporations can get from consumers more money than consumers have. Trusts, trade associations, price agreements, and advertising enable some dealers to obtain larger shares of consumer income than otherwise they would obtain; but such gains are at the expense of other dealers, not at the expense of consumers. It is easy to see that if people had no source of income other than a single Cor-

poration, and no place to trade except the Corporation Store, the Store could not increase its dollar sales unless the Corporation increased its dollar payments to consumers. If the Corporation failed to do so, any one department of the Store could enlarge its receipts only if the receipts of other departments were proportionately reduced. In the real world, as well, business as a whole ordinarily does not receive from consumers any more money than it gives them; except in so far as currency is coined or printed, or bank credit is expanded, within the period in question, to provide consumers with money to spend. For the most part, if any one industry succeeds in taking in more than it disburses, it does so at the expense of other industries. Consequently, it is important for us to consider whether corporate savings are made in such a way as to withhold from consumers any of the money which corporations receive from consumers.

That the relation of corporate savings to business depressions can be discovered only by means of patient analysis must be evident to any one who has made even a beginning of trying to understand the two hundred theories, more or less, that have been advanced to account for business cycles.[2] Indeed, on every hand is evidence of the complexity of the subject. It is, in fact, so involved, and the economic world in which we live is so far removed from the primitive community of our pioneer, that most people make no attempt to understand the causes of business depressions — no attempt to account for the anomaly of concurrent complaints of widespread poverty and general overproduction. To them the whole situation is simply inexplicable. Among those who do try to explain the mystery, many see no reason for being concerned about savings; they do not get far beyond the idea that thrift is a virtue.

Most people, in any event, see no hope of unraveling the complexities by starting out, in the favorite way, with a hypothetical economic world which to them seems ridiculously simple — a world peopled, for example, by Robinson Crusoe and his man Friday, or by the Children of Israel in the wilderness. Yet it is impossible to reason about anything, except on the basis of assumed conditions. This is as true of physics as it is of economics.[3] It is an error to assume that economics in this respect differs from the so-called 'exact sciences.' All sciences are inexact; the differences are only in degree. Even though some of the natural sciences succeed in isolating the phenomena with which they deal to an extent which is rarely possible in the so-called 'social sciences,' yet in the practical application of the results of laboratory experiments, many allowances have to be made for the possible effects of causes which do not operate in the laboratory. In the construction of a bridge, for example, the engineer, though he is dealing only with inanimate materials, often feels obliged to allow for at least 300 per cent more than the calculated maximum strain, so large is the range of error in his measurements, due in part to unknown variations in the strength of materials, and so numerous are the factors which he does not measure at all.

Since, then, it is impossible to take into account all the fluctuating factors that attend every economic situation, we can arrive at principles only by reasoning from assumptions — assumptions which we know will not hold true at any given time or place; and since, accordingly, we are obliged to make some assumptions concerning existing conditions, before we begin to trace the flow of money into various kinds of savings and to seek the obstructions in the flow of money to consumers, we may as well begin with assumptions that make the problem

relatively uninvolved. This method need not mislead us, if we take pains to distinguish sharply between the simple world of our illustration and the complex world of reality, and if we take care, in drawing conclusions, not to lose sight of our assumptions. With these assumptions and tentative conclusions clearly before us, we can proceed to test our conclusions by seeing what happens when we change our assumptions. Thus, we can begin by assuming, for example, that there are no fluctuations in the price-level or in the volume of money in circulation. Then, one by one, we can introduce the various factors that we have left out of our hypothetical cases. In this way, before we get through, we can take into account all the attributes of the real world that are essential for our purpose.

Business in a Simple Community

Let us, then, starting with a relatively simple community, make the following eight assumptions:

(1) A single Corporation produces and sells to consumers for final consumption everything that is sold in the entire community. That is to say, there are no middlemen, no sales of producers' goods, and no foreign trade. In other words, there is complete integration of industry, vertical and horizontal, under one head.

(2) This Corporation is the source of all consumers' income, and all the money that the Corporation disburses is paid out as wages, or as wages and dividends. Thus, wages cover all costs of production.

(3) The price-level remains unchanged.

(4) The total volume of money in circulation remains unchanged.

(5) The velocity of money and the circuit velocity of money remain unchanged.

(6) There are no taxes and no Government expenditures.

(7) Wages are paid in the unit of time in which the goods are produced; whereas goods are sold and dividends are paid in the succeeding unit of time. (For convenience each unit of time is called a year.)

(8) All wages and dividends are spent for goods in the unit of time in which they are received.

First, we shall consider the problem of adequate consumer demand under these eight assumptions. Then, one by one, we shall discard these assumptions, and see how each change affects the problem.

Case I

Let us now assume that, year after year, the Corporation produces a given volume of goods, sells all the goods, and pays out in wages all the money it receives for the goods. Under these conditions, the annual production-consumption equation is perfect. All the money in circulation is used alternately, as wages to bring about the production of goods, and as expenditures in the market to bring about the consumption of goods. Each year the Corporation disburses as costs all the money that consumers pay for the output of the previous year, and the consumers are therefore able to buy the entire product, year after year, without a change in the price-level. Clearly, then, as long as the Corporation markets the same volume of goods each year and realizes no profit, it does not prevent consumers from getting enough money to buy all the goods on the market, at the current price-level.[4]

Year after year this perfect balance of supply and demand might be:

Output	1,000,000 units of goods
Sales	1,000,000 units of goods
Receipts	1,000,000 dollars
Wages	1,000,000 dollars

Let us call the index of prices in this Case, 100. Thus we arbitrarily choose the figure 100 to designate the price-level, when the number of available units of purchasing power is exactly the same as the number of available units of goods.

Obviously, no matter what changes take place in the future, as long as there are no changes in the relative quantities of consumers' income and goods sold to consumers, the price-level will continue at 100.

We may now consider what would happen in other Cases.

The Number of Corporations is Immaterial

This hypothetical commercial world, however, may seem to some people so far removed from the real world as to be useless for our purposes, if not misleading. Before taking up other Cases, therefore, it may be well for us to note that our first assumption — to the effect that all business is carried on by a single Corporation — though it vastly simplifies the problem of exposition, in no way invalidates the reasoning. There is, in fact, no other way of finding out the net effects of the operations of the several hundred thousand corporations in the United States, except by combining all their individual accounts; and there is no way of completing the picture for the entire world of commerce, without incorporating in our combined account all other monetary transactions. Now that is precisely what we have done, by assuming

that all money paid in connection with either the production or consumption of goods passes through the treasury of one Corporation.

Still further to clarify this point, let us make all the above assumptions as before except that, instead of assuming that there is only one Corporation, let us now assume that there are half a million: some making soap, others designing ships; some growing oranges, others erecting billboards; some gathering news, others hauling freight; and so on through a thousand pages of details. Let us now suppose that we take half a million pages in which to present all the individual accounts of all these concerns. But, since total sales must be the sum of all the individual sales, and so with wages, output, receipts, dividends, and all other categories, let us, in order to see the whole picture, go through the half-million balance sheets and collect and classify all the items. This laborious process brings us at last to the point from which we started, with a statement that represents all business as though it were the province of a single concern. Clearly, then, whatever we find to be true in the case of our single Corporation would be equally true if, keeping the same totals, we distributed the activities among a thousand or any other number of corporations; and whatever we find to be the effect of a given transaction would be the effect even if all our figures in each Case were multiplied by a thousand, or by any other number.

It follows that the inclusion of all costs of production under the single item of 'wages' is not a source of error. Suppose that item were divided, in each case, somewhat as follows:

Wages and salaries paid to producers of raw materials	$200,000
Wages and salaries paid to producers of industrial equipment	100,000
Wages and salaries paid to producers of finished goods	400,000
Wages and salaries paid to distributors	100,000
Wages and salaries paid to transporters	100,000
Insurance and miscellaneous costs	50,000
Interest paid for the use of money	50,000
Total costs	$1,000,000

The total costs which must be recovered from final consumers would still be $1,000,000. The one fact which must not be overlooked, and which even in our simplest Cases we have not overlooked, is that all costs of every kind, in every stage of production and distribution, are advances made with the expectation that they will be recovered eventually from consumers in the sales price of the finished product. All these costs, plus a profit, are accumulated in the price which consumers must pay if production is to continue without a set-back.

We are not overlooking the fact that in the real world, where business is conducted by many corporations instead of by one, the influences of these various corporations do not synchronize. That is to say, some are increasing output while others are decreasing output; and this is true also of inventories, sales, wages, profits, dividends, bank loans, and surplus. At any one time, therefore, some corporations are disbursing more than enough money to enable consumers to buy their product while other corporations are disbursing less than enough. That this is what actually happens is evident from the analysis of 160 individual corporation balance sheets which we have summarized in Table 30 (Appendix). We expect to show in due course, however, that the deficiency in consumer purchasing power which, under certain conditions,

is caused by our single Corporation would be caused by the non-synchronizing influences of any number of corporations.

Case II

Let us, then, without being disturbed because the total business of the community is small and under one management, consider what happens when output per dollar of wages is increased and profits are realized. In that event the same balance of supply and demand prevails, year after year, once the arrangement is fully under way, as long as all the profits are distributed as dividends:

Output.....1,000,000 units of goods
Sales.....1,000,000 units of goods
Receipts.....1,000,000 dollars
Wages..... *900,000 dollars*
Dividends..... *100,000 dollars*
Index of prices = 100

(*In each Case the features which distinguish it from the preceding Case are italicized.*)

Thus it is clear that industry could go on in this way indefinitely, always selling its entire product — no overproduction, no underconsumption — as long as it continued to return to consumers in some way all the money that it took from consumers in the sales price of its product, and as long as consumers spent all that they received.

But industry is not satisfied with an even exchange of this kind. On the contrary, industry always aims to take in more than it pays out as costs and dividends combined, and in some way to save the balance. As a matter of fact, corporations in the United States, taken as a whole, disburse as dividends only about half their profits.[5] The other half they save in various ways, mainly by increas-

ing their (1) inventories, (2) accounts receivable, (3) fixed assets, and (4) cash balances. Let us, then, observe the effect upon the annual equation of each of these four forms of saving; let us see in each case whether it tends to cause a deficiency in consumer purchasing power.

Case III

First we assume that the saving is effected by means of increased inventories; that is to say, instead of paying dividends, as in Case II, the Corporation uses its profits to pay more wages and thus to increase its production; but the increase is all accounted for by goods in process or finished stocks on hand, and no attempt is made to sell any more than was previously sold.

Accordingly, the statement for the year is:

Output.....*1,100,000 units of goods*
Additional Inventory..... *100,000 units of goods*
Sales.....1,000,000 units of goods
Receipts.....1,000,000 dollars
Wages.....*1,000,000 dollars*
Index of prices = 100

Thus it is clear that the Corporation can save by increasing its inventories, without thereby causing a deficiency of consumers' income, as long as it continues to pay to consumers enough to enable them to buy, at the current price-level, all the goods it attempts to market. In other words, profits may be used to make *permanent* additions to inventories without affecting the annual equation.

Case IV

Instead of piling up unsold goods, however, the Corporation might sell its entire *additional* production to people who within the year could not pay for these goods.

In that case, the profits (savings) would be accumulated, not in inventories but in accounts receivable, that is to say, in prospects of payment for goods already sold. Thus, though the Corporation would receive no money for its additional output, the total output would be marketed at the current price-level.

In order to make this Case realistic and a forecast of later discussion, we may mention the numerous devices that are employed, when sales of houses and automobiles fail to keep pace with output, to increase sales by making it easier and easier for consumers to mortgage their future incomes.

The balance would be affected in this way:

Output	1,100,000 units of goods
Sales	*1,100,000 units of goods*
Receipts	1,000,000 dollars
Accounts Receivable	*100,000 dollars*
Wages	1,000,000 dollars

Index of prices = 100

Increased production could thus be disposed of year after year, indefinitely, without causing a surplus of goods or a fall in prices, provided each year the additional output was offset by the addition to accounts receivable. There would still be a deficiency of purchasing power, as we use the term; but as long as the excess of goods above purchasing power was regularly disposed of in this way, the deficiency would not curb business activity. This, we may note in passing, would be equally true if the excess goods were given away or burned up.

Obviously, however, since consumers receive each year from the Corporation no more than enough to buy at the established price-level the original annual output, and since there are no other sources of consumers' income, the unpaid accounts could not be paid in any

subsequent year without causing in that year a surplus of unsold goods, or a fall in prices, or both. Under the assumed conditions, therefore, the Corporation cannot, by adding either to its inventories or to its accounts receivable, save anything worth saving. Though it can save goods which are of value to consumers, these goods are of no value to the Corporation as long as consumers cannot buy them; and though it can increase the accounts due from consumers, these accounts are of no value as long as the Corporation does not disburse to the consumers enough money to pay the accounts, and the money is not obtainable elsewhere.

Case V

Commoner than either of these forms of corporate saving, however, is the saving of profits in the form of increased capital facilities. Let us, then, starting with the conditions of Case II, suppose that during the next year no dividends are paid, but instead the Corporation uses all its profits to increase its capital facilities — its buildings, machines, power plants, and the like; in short, what is ordinarily called fixed capital. In the process it necessarily pays out as wages all that it receives for its product, since under the assumed conditions this is the way in which the new facilities would be acquired. The amount of money disbursed to consumers is, therefore, precisely the same as though all profits had been distributed as dividends.

Let us assume, however, that these additional facilities turn out to be useless; an assumption, by the way, which will not seem far-fetched to any one who observes what is going on every day in the real world. The output and sales, then, as well as the receipts and costs, remain the same as in Case I; and the year's record is:

Output.....1,000,000 units of goods
Sales.....1,000,000 units of goods
Receipts.....1,000,000 dollars
Wages (in producing goods).... 900,000 dollars
Investments (in creating new facilities)..... *100,000 dollars*
Index of prices = 100

Thus it is clear that the Corporation, by using its profits to increase its fixed capital without increasing its volume of production, does not necessarily thereby cause a deficiency of consumers' purchasing power. In fact, the Corporation could continue indefinitely to save its profits in the form of unused factories, railroads, wharfs, radio stations, and what not, without affecting the annual production-consumption equation. Such a use of profits would have no more effect upon the relation of supply and demand than the use of profits to provide free libraries or free lunches. The essential point is that under these conditions the goods offered for sale and the money offered for the goods are precisely the same as before. In short, the investment of profits in new capital facilities does not, by itself, cause a shortage of demand in consumers' markets.

If we seem here to be elaborating upon the obvious, we do so because the point we are making, obvious or not, is frequently missed. Indeed, there are many who regard 'overbuilt industries' as the cause of business depressions. In their view the mere fact that society is equipped to produce more than it can sell is the cause of the failure to sell what is produced; as though the mere fact that a man could cut two cords of wood a day necessarily prevented him from using the one cord which he did cut.

In the use of the current income, it is said, there must exist 'an economically right proportion between expend-

iture in withdrawing commodities from the retail shops for consumption, and expenditure in maintaining and enlarging the plant and materials functioning in each stage of production.'[6] Certainly this right proportion must exist if society is to avoid wasting its substance in riotous capital expenditures; but the fact that the proportion is wrong, or even very far from wrong, does not in itself account for the failure of consumption to keep pace with production. In short, the creation of excess capital facilities, as long as they remain unused, does not necessarily have any part in preventing consumers from buying the output of the facilities that are actually used.[7]

Case VI

But seldom do men intentionally invest in useless facilities; as a rule, they increase their facilities in order to increase their production, and as a rule they succeed. The question as to what happens to the annual equation when they do succeed is, therefore, of major importance. What actually happens, under the assumed conditions, will be evident if, starting again with Case II, we allow our Corporation in the following year to pay no dividends, but to use its profits to increase both its capital facilities and its output. Since total receipts are thus paid out as wages, and since the increased output is not put on the market until the following year, all goes well; supply and demand balance as before, and the price-level is still 100.

In the following year, however, when the increased output is ready for sale, there is no possibility of selling the entire output at the current price-level, even though the Corporation returns to consumers all the money it receives from them. The deficiency in purchasing power thus occasioned appears in this statement:

Output.....*1,100,000 units of goods*
Sales.....1,000,000 units of goods
Unsold Goods..... *100,000 units of goods*
Receipts.....1,000,000 dollars
Wages.....*1,000,000 dollars*
Index of prices = 100

At this rate, year after year, the stocks of unsold goods will become larger and larger, since each year consumers can buy no more than the original output.

The crux of the situation is this: Money that is once used to bring about the production of goods is again used to bring about the production of goods, before it is used to bring about the consumption of goods. In other words, it is used twice in succession to create supply; whereas if the $100,000 in question, instead of having been *invested* in the production of additional goods, had been paid out as dividends and *spent* by the recipients, the $100,000 would have been used alternately to bring goods to the markets and to take goods off the markets. If we have come upon anything of major importance since we left our pioneer on the very first page, this may well be it.

Let us, therefore, see whether we can make the point clearer by means of a different approach. Let us suppose that the Corporation employs one hundred men to make one thousand gallons of maple syrup, pays them three dollars a gallon for producing it, and sells it at cost. So far, then, in this branch of its business, the Corporation is clearly doing its full part to maintain an equilibrium between supply and demand; for, in connection with each gallon it produces, it takes from consumers and returns to consumers exactly three dollars. Suppose, however, that the Corporation, while continuing to pay three dollars a gallon in costs, sells the next season's output at four dollars a gallon, and retains one thousand dollars as undistributed profits. Thus, by taking from consumers

four thousand dollars and paying them only three thousand dollars, the Corporation leaves them one thousand dollars short of enough money to buy its other products.

The next year, however, the Corporation uses all these profits to increase its output. Having thus disbursed four thousand dollars, it has given consumers enough money to buy the *previous* year's output of one thousand gallons at four dollars per gallon. But in the process of using its profits to add to the output, the Corporation has given consumers no money wherewith to buy these *additional* gallons. Consequently, it has a surplus on hand.

If in the following year it carries out the same policy of increasing output by the use of profits, it pays four thousand dollars in wages, sells one thousand gallons at four dollars a gallon, and produces another surplus. Thus it doubles its stock of unsold maple syrup. In this way it would continue to pile up inventories, unless the deficiency in purchasing power thus created were offset in some way. Clearly, under the assumed conditions, the Corporation never could sell this surplus of maple syrup without proportionately increasing its unsold stocks of other products.

Here the reader's patience may give out. Why go on with this academic analysis, he may ask, when everybody knows that, as a matter of fact, the very processes of financing an increased volume of production increase the volume of money in circulation; and that, in any event, surplus stocks can be sold by reducing prices? The question is pertinent but we are not yet ready for it. We shall consider it at length in Chapters XXVI and XXVII.

Under our assumptions, the Corporation is the sole source of consumer purchasing power and has no means of increasing the volume of money in circulation. Conse-

quently, we cannot apply to the real world any conclusions concerning deficient purchasing power which we may draw from Cases set up under these assumptions, without in every Case adding the qualification, 'unless the deficiency is made up from outside sources.' *We here make that qualification, once and for all, with respect to every Case in this and the following chapters.* In later chapters we shall consider to what extent and by what means these deficiencies actually are made up from outside sources.

Case VII

We have now examined the effects on the annual equation of three kinds of corporate savings: inventories, accounts receivable, and fixed capital. There remains for consideration the effect of cash savings.

Any one who is familiar with the financial policies of the United States Steel Corporation knows that large profits are sometimes saved, not only in the form of increased inventories, accounts receivable, and fixed capital, but also in the form of bank balances. (See Figure 19, page 129; Figure 27, page 146; Figure 28, page 147; and Table 10, Appendix.) The cash balance of the Steel Corporation on December 31, 1924, was $131,357,415, and this amount was not offset by bank borrowings. No further analysis is needed to show that if the Steel Corporation conducted the entire business of the country, under the conditions we have laid down for our single Corporation, and if it accumulated profits as cash balances to the extent of $131,357,415, these savings would cause deficiencies in consumer purchasing power of exactly that amount. The Steel Corporation we cite merely as an example. Obviously, all the corporations in the country put together, in so far as they jointly realize

profits, directly or indirectly from cash sales to consumers, and allow these profits to accumulate in bank balances, cause a shortage of consumer income, unless that shortage is overcome in some way yet to be considered.

In this Case we have introduced a new agency into our simple community, for we have assumed that profits are left on deposit in banks. The further bearing of banking practices on the annual equation we shall discuss later.

Conclusions

We come, then, to these two conclusions:

If, under the assumed conditions, the Corporation earns profits from sales to consumers, and uses the profits in such a way that they are not returned to consumers, dollar for dollar, within the period in question, consumers have no means of buying the output without a fall in prices, even though the output is not increased.

If, under the assumed conditions, the Corporation increases its output by any means whatever, with or without increased capital facilities, and does not correspondingly increase its payments to consumers within the period in question, consumers cannot possibly buy the output at the current price-level.

CHAPTER XXV

INDIVIDUAL INCOME AND THE ANNUAL EQUATION

Since individuals as well as corporations save, we shall now discard the assumption that individuals spend all their income, and consider the effect of personal savings on the annual equation. We are here dealing with large amounts; for ordinarily not more than half of the billions of dollars which are saved every year are the savings of corporations. (See Figures 32–34.)

Before we take up the question whether personal savings have anything to do with deficiencies in consumer demand, we should note that, year in and year out, individuals cannot spend more than they receive; in the long run, their expenditures cannot exceed their income. If, therefore, they receive their total income from industry — if they receive nothing from governments which governments have not taken from industry, directly or indirectly, which in the United States is ordinarily the case — they cannot turn over to industry more than they receive from industry. Consequently, even if individuals promptly spent their total income for consumers' goods, even if they saved nothing, they could not *offset* by a single dollar the deficiencies in purchasing power which, as we have just seen, are caused by corporate savings. The only question, then, is whether the savings of individuals *add* to the deficiencies which result from the savings of corporations.

According to the generally accepted theory, the savings of individuals cannot add much to these deficiencies, since most of the money that individuals save is invested,

and since there is said to be no fundamental distinction between money invested and money spent.

Distinction between Money invested and Money spent

'When money is invested,' we are told, 'it is not locked up in bank vaults. Most of it is paid out, directly or indirectly, as wages, and thus becomes consumer demand.' Says one noted economist: 'Money invested is spent. . . . The view that the expenditure of wage-earners in some way contributes more to the activity of trade than the expenditure of other consumers is very prevalent, but it is fallacious; once it is recognized that money invested is spent, the argument falls to the ground.' [1]

But does it fall so easily? Surely, no one doubts that various factors accelerate or retard the circuit flow of money from consumer back to consumer. Now one of these factors is the changing proportion of individual income that is invested. The larger the proportion that is spent rather than invested, the faster is the circuit flow. For income that is spent reaches consumers' markets much more quickly than income which is invested. There is no doubt about that. The route from the pay envelope to the retail store is short and direct; but the route from the bank, or insurance company, or investment house, via the corporation to the pay envelope and thence to the retail store, is longer and more devious. And time, though it is commonly left out of account, is an essential part of the problem.

This, however, is not the crucial distinction between money invested and money spent. Far more important is the fact that money spent is used *first* to take away consumers' goods, whereas in many cases money invested is used *first* to produce more consumers' goods. And when individual income is invested, and thus used twice

in succession to bring goods to market, it creates a deficiency in purchasing power. In our maple syrup illustration, for example, when the corporation disbursed as wages all the money which it received from consumers for the maple syrup, consumers had just enough money and no more than enough to buy the entire output. If they had *spent* all their wages, the entire amount would have been used alternately to produce goods and to buy goods. If, instead of *spending* all their wages, they had *invested* ten thousand dollars in Corporation securities, and if the Corporation had disbursed this money in the process of increasing production, consumers would still have had just enough money to buy the original output, but not enough to buy the additional output. For in that case ten thousand dollars would have been used twice in succession to produce goods. To prevent such a deficiency, to maintain the balance between production and consumption, and thus to make sustained prosperity possible, money which is used in the production of goods must be used in the consumption of goods before it is again used in the production of goods; or the effect of such use on the annual equation must be offset in some way. In short, whenever money is used twice in succession to produce goods, as it is in many cases when individuals invest their income, it is doing its part, as our Cases show, to stock the market beyond the capacity of consumers to buy at current prices.

This condition is brought about only when individuals save in certain ways. Of much concern, therefore, are the two questions we now purpose to discuss: (1) Which ways of saving cause deficiencies in purchasing power? (2) What proportion of individual income is saved in these ways?

Various Ways of saving

Among the ways in which individuals save are these: (1) in real estate, (2) in commodities, (3) in hoarded money, (4) in banks, (5) in life insurance, (6) in corporation securities, and (7) in government securities. The effect of each of these seven forms of saving upon production and upon consumption, and so upon our main problem, we shall now consider.

Savings in Real Estate and the Like

First of all, we may narrow our discussion by discarding as irrelevant all forms of saving which merely involve the transfer from one individual to another of property, such as real estate, which is to be neither consumed nor reproduced. Savings of this sort — in so far as they do not affect the next use of the money in question, nor involve changes in the volume of money — do not concern us, because they affect neither side of the production-consumption equation. Obviously they cannot; for when a man buys an acre of land, although one man then has more land and the other has more money, the total volume of money in consumers' hands and the total volume of commodities in consumers' markets remain exactly as before. Furthermore, there is no way in which such transactions can encourage or discourage the production of more land.

And all that we have said about land applies as well to water rights, first editions, old masters, and old issues of securities. We have used land merely to typify those things which, unlike carrots and carpets and cartridges, are to be neither used up nor duplicated. Individuals could invest all their savings in such things without causing a dollar of deficiency in consumer income.

Savings in Commodities

This is equally true of investments in consumable commodities. Householders could lay up stores of soap, linen, and salt without causing deficiencies in consumer demand; for such savings, as long as they remained savings, could not occasion overproduction. In fact, *permanent* savings of this sort would be just as helpful in maintaining the annual equation as though the commodities had been consumed.

For several reasons, however, savings in commodities cannot be counted on, year after year, to offset deficiencies in consumption. In the first place, the extent to which commodities can be saved advantageously is, as we have explained elsewhere,[2] extremely limited; for there are many risks of depreciation due to changing customs, needs, and weather, in addition to the risk that the commodities will spoil; and there are also expenses of handling, storage, and insurance. Furthermore, although a barter economy provides nothing but these risky and expensive ways of saving, a money economy offers the individual far more attractive ways. In any event, savings by individuals in the form of consumable goods could be at best only a temporary expedient, not a solution of the problem, since the very object of such savings, from the individual's point of view, would be to reduce the amount of necessary future buying of these very goods, either for himself or for other consumers. When these hoarded goods were used up, and current buying was proportionately curtailed, the markets would feel the full effect of the deficiency from which they had been temporarily relieved. Thus savings in consumable goods could do no more than postpone trouble. Finally, in actual practice such savings would be increased, not when they would help to adjust supply and demand, but on the contrary

precisely when they would make matters worse; namely, when demand was outrunning supply and prices were rising. Thus, in 1919, consumers made a bad situation worse by continuing to hoard sugar until the price rose above twenty-five cents a pound, but lost all interest in hoarding when the price dropped to five cents. For all these reasons, saving by consumers in the form of commodities does not offer a solution of the problem.

Savings in Hoarded Currency

In so far as an individual saves by hiding currency in the proverbial stocking, or by hoarding it in any other way that prevents it from proceeding on its circuit flow, he causes a dollar of deficiency in purchasing power for every dollar he saves. This is self-evident. Hoarding of money is, in fact, the only one of the seven ways of saving in our list which everybody condemns.

In the United States, however, the amount of money which is added to such hoards each year is insignificant compared with the amounts which are saved in other ways. Indeed, in at least one of the War years, total savings in the United States exceeded in value the total amount of currency in circulation. During the War, it is true, on account of the orgy of inflation in Europe, the currency of the United States was hoarded abroad in large quantities; how large, nobody knows, since the governments of the world do not yet coöperate to keep track of the international movements of currencies. It is certain, however, that the annual additions to hoarded United States currency, at home and abroad, are trifling compared with annual income, and small compared with annual savings. And only the accretions concern us. Once Injun Joe had caused a deficiency in current purchasing power by burying his casket of money in the

cave, that money had no further effect on the annual equation until Tom Sawyer found it and put it into circulation again.

Savings in Banks

Nowadays, at least in the United States, most people, instead of tucking their savings away in stockings, deposit them in banks. The fact that these deposits are large and steadily increasing is shown in Figure 37 and in Table 24 (Appendix). In 1924 they reached the substantial sum of over 41 billion dollars, of which almost exactly one half was in savings banks. Between 1913 and 1924 both the total individual deposits and the savings bank deposits were more than doubled.

Since, however, these savings concern us mainly because they involve an immediate withholding of consumer demand for commodities and a potential future demand, we should correct the figures to allow for fluctuations in the value of money. The corrected figures show that, in purchasing power, savings bank deposits were only 31 per cent larger in 1924 than in 1913. Moreover, the increase did not continue throughout the period. On the contrary, total savings bank deposits fell off steadily, in purchasing power, from 1913 to 1919. In fact, the entire gain for the years 1913–24 was made after the break in prices in 1920, that is to say, during the last four years of the period.

The next question is whether such savings cause a deficiency of money spent in consumers' markets. In attempting to answer that question we must first remind ourselves that these savings are part of the income which individuals receive from industry. If they spent all this income for the products of industry, they would do no more than their part, as our Cases show, to enable in-

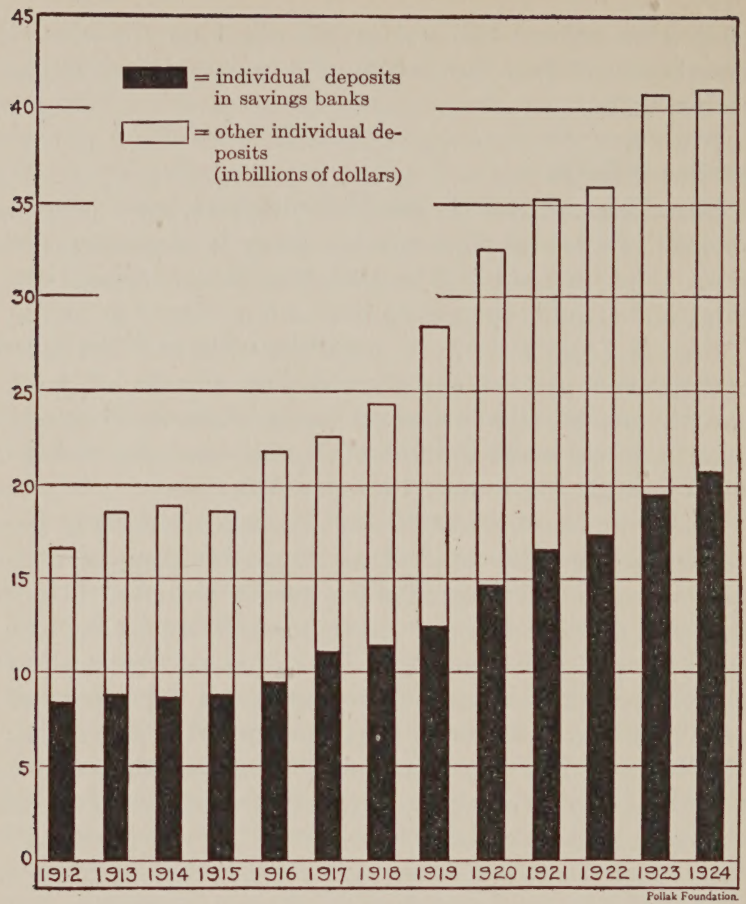


FIGURE 37. INDIVIDUAL BANK DEPOSITS, 1912–24 (in billions)
(Data from *Savings Deposits and Depositors*, published by American Bankers' Association, New York, 1925)

dustry to sell its total output at current prices. Since, however, they withhold part of their income from the markets, and turn it over, instead, to savings banks, the extent to which these savings cause a deficiency in consumer buying depends on what the banks do with the money.

Most of this money they invest, since only in that way can they continue to do business. We must recall, therefore, the distinction we have made between money that is invested and money that is spent; and we must ask what proportion of individual deposits is invested by the banks in such a way that it is used twice in succession for the production of goods. We must inquire, in other words, to what extent the banks put these deposits into circulation on the consumer side and to what extent on the producer side.

This question, unfortunately, nobody can answer definitely, not even the Comptroller of the Currency, or the Federal Reserve Board, or the American Bankers' Association. Incidentally, it may be remarked, this paucity of information concerning the way in which nearly 21 billion dollars of individual savings are used, is in itself a striking commentary on the neglect by the business world of a matter so vital to its prosperity as sustained consumer demand.

However, a little general information on this subject is presented in the annual reports of the Comptroller of the Currency. His report for June 30, 1924, which gives the resources of 29,348 banks, including 613 mutual savings banks, shows that loans and discounts amounted to 31 billion dollars.[3] (See Table 25, Appendix.) What part of the 31 billion was first spent in consumers' markets, however, it is impossible to tell. In any event, it could not have been a large part, since as a rule bank loans are made to facilitate production and distribution rather than to facilitate consumption.

The savings deposits of the 613 savings banks, amounting to about 6686 million, were represented in part by loans and discounts on real estate, other than farm lands, amounting to 2192 million, and unclassified loans

amounting to 1547 million. As there is no way of telling what proportion was put into circulation by the banks on the consumer side and what proportion on the producer side, we have no means of knowing the effect on the annual equation of the use by these savings banks of more than half the money that was entrusted to them. Judging from the practices of what appear to be typical banks, however, it seems safe to conclude that more than half the deposits were used first on the producer side of the equation.

Thus, by a kind of short circuit, at least 15 billion of individual savings were used twice in succession to bring about the production of goods. Unless the deficiency caused in this way was offset, the fact that individuals entrusted part of their income to savings banks, instead of spending it, caused a shortage of demand for finished goods.

About 6 billion dollars, or 10.5 per cent, of the resources of all the banks, including about 25 per cent of the resources of the savings banks, were invested in Federal, State, and local government securities. The effect on the annual equation of this use of the people's savings we shall consider in our discussion of Government Finance (Chapter XXVIII).

Savings in Life Insurance

Equally important in this connection are savings which are entrusted to life insurance companies. Indeed, the resources of these companies in 1924 exceeded those of savings banks by over 750 million; the new insurance written during that year amounted to over 13 billion; and the money held in trust for policy holders was over 10 billion. Here are vast individual savings. Whether or not they lead to deficiencies in consumer buying depends,

evidently, on what the insurance companies do with all this money. What they do with the part which they invest appears in Table 26 (Appendix).

From this table it is not possible to tell how much money is loaned by insurance companies for purposes of individual consumption. There are only two items, however, namely, policy loans and mortgage loans, that could possibly cover large transfers of money directly to consumers for use in buying consumables. The investments in stocks and bonds (other than Government bonds) are mainly for purposes of production; and these investments amount to over two billion dollars. It is safe to conclude, therefore, that one third of the income which individuals, instead of spending, turn over to insurance companies, is next invested in production. That is to say, it is used twice in succession in creating supply instead of being used alternately in creating and in absorbing supply. Thus insurance companies, as well as savings banks, in the ordinary course of business, make such uses of individual savings that, in the absence of counteracting influences yet to be discovered, they lead inevitably to overproduction and resultant business depression.

Savings in Corporation Securities

Individuals also save by investing their money in the bonds and stocks of corporations. That the amount of money saved in this way must be large is evident from the fact that about 10 per cent of the total personal income of the United States is received as dividends and about 7 per cent as interest and other investment income (see Figure 29); and from the further fact that 30 per cent to 47 per cent of the incomes of the income classes above 25 thousand dollars is received as dividends. (See Table 27, Appendix.)

How do these savings affect the annual equation? This question we have already answered at length in the previous chapter, in which we have shown the effect of corporate savings. For, clearly, if a certain use of money by corporations causes a deficiency in purchasing power, the deficiency is the same whether the corporations take the money from earnings, or distribute the money as interest and dividends, and then borrow the same amount from individuals. In other words, the effect on the annual equation of the use of savings is precisely the same, except for the time involved, whether corporations take the money directly from undistributed profits, or from profits which are first disbursed to individuals and then invested by them in corporation securities. Concerning the effect of such individual savings, therefore, we must hold to the conclusions reached in the previous chapter.

From these conclusions it follows that savings in capital facilities, beyond those which are required to satisfy consumer demand, are worse than wasted; for the mere existence of these excess facilities leads to cut-throat competition, which reduces profits and thus tends to reduce production. From the standpoint of society, therefore, it is impossible to save intelligently without first solving the problem of adequate consumer income. As it is to-day, certain individuals can save at the expense of other individuals; certain corporations can save at the expense of other corporations; and, from the standpoint of the individual and of the corporation, these savings are real. But society as a whole cannot save anything worth saving at the expense of consumers as a whole, for the capacity of consumers to benefit by what is saved is the sole test of its worth.

We are not here suggesting that people ought to spend their entire income; for, as individuals, they must save. We are merely pointing out the fact that if they do not spend all, there is a deficiency in consumer demand, unless the effect of their savings is offset in some way. This qualification, let us not forget, still applies to all our conclusions.

At least we should not naïvely assume that since thrift is a virtue, the more money people can be induced to save the better off the country is, regardless of the relation of such savings to glutted markets, unemployment, and the resultant losses of the savers. 'There is a spirit of spending now,' said an article in the *New York Times* in the midst of the depression of 1921. 'Such a spirit ought, in the interests of workmen and of society, to be checked.' [4] Are we sure of that? At least it does not seem logical to urge people to save, and to censure them for buying goods, at the very time when, because producers cannot sell their goods, national income has fallen off four billion dollars and at least four million workmen are idle.

Savings in Government Securities

The only important question concerning individual savings that now remains, under the assumed conditions, is whether individuals can save, without causing deficiencies in purchasing power, by investing in the obligations of governments. So far we have taken no account of this means of saving, no account of the investments of corporations, of individuals, of banks, and of insurance companies in Government securities, including State, county, and municipal bonds. This means of saving we shall consider later in connection with the whole subject of Government receipts and expenditures.

The Dilemma of Thrift

Up to this point, then, we have discovered no way whereby either corporations or individuals can accumulate savings without causing deficiencies in consumer purchasing power. For, under the assumed conditions, two requirements must be fulfilled in order to prevent such a deficiency and thus enable business as a whole to continue, year after year, to produce and sell a given output: The first requirement is that all profits, if there are any profits, shall be returned to consumers. The second requirement is that consumers shall spend all the money that they receive. Under these conditions, however, savings are impossible either for corporations or for individuals. Yet both corporations and individuals *must* save. This, then, is the dilemma of thrift.[5]

CHAPTER XXVI

THE PRICE-LEVEL AND THE ANNUAL EQUATION

UNDER the assumed conditions, then, industry cannot sell an increased volume of commodities. Consequently, there is no use in producing them. If there is an increased output in any one year, the only way to sell this surplus, without creating another, is to curtail production in subsequent years; but a society which is thus restrained cannot make progress toward higher standards of living. From all these conclusions there is no more escape than from the multiplication table.

And it must be admitted that all this sounds suspiciously like the real world. This appears to be, in a general way, what takes place decade after decade in the money and profit economy in which we live and labor, save and spend — the actual industrial régime in the midst of which, with periodic setbacks and on the whole with questionable success, we constantly endeavor to obtain, as a reward for our sacrifices and our struggles, more of the material satisfactions of life.

It is too soon, however, to try to transplant conclusions from our hypothetical world to the real world. Whether they would survive under such different conditions, we cannot make sure without further study; for we are still proceeding, in all our hypothetical Cases, under six of our eight assumptions which we have not yet discussed, but which everybody is well aware are contrary to fact: namely,

(1) That the price-level remains unchanged;

(2) That the total volume of money remains unchanged;

(3) That there are no taxes and no Government expenditures;

(4) That the time-lags are fixed, since all wages are spent for goods in the unit of time in which they are received, and

(5) All goods are sold and all dividends are paid in the unit of time succeeding the one in which the goods are produced;

(6) That velocity of money and circuit velocity of money remain unchanged.

These six assumptions we shall abandon, one by one, and observe to what extent our conclusions are thereby affected.

First, we shall introduce changes in the price-level. Changes upward would obviously make matters worse; for if consumers could not buy a given output at a given price-level, they could buy even less at a higher level. The only question is, then, whether consumers could buy a constantly increasing volume of production on a constantly falling price-level. Theoretically they could, since their income, however small, would be sufficient to buy an additional output, however large, if prices were reduced far enough. This conclusion would hold, no matter what changes took place meantime in corporate savings, individual savings, wages, profits, and dividends. *If under these conditions industry could produce the additional goods*, it could sell the goods.

Case VIII

To illustrate, we may start again with the perfectly balanced conditions of Case I:

Output	1,000,000 units of goods
Sales	1,000,000 units of goods
Receipts	1,000,000 dollars
Wages	1,000,000 dollars

Index of prices = 100

The question now is whether under the assumed conditions it is possible to increase the annual output and yet preserve this balance of supply and demand by means of lower prices. Let us see. With a larger output and a lower price-level, the annual balance sheet might soon become:

Output	*1,100,000 units of goods*
Sales	*1,100,000 units of goods*
Receipts	1,000,000 dollars
Wages	1,000,000 dollars

Index of prices = 90 +

In this Case the index of prices falls to 90+, because the supply of goods is 10 per cent larger while the dollar demand remains the same, and the index is a measure of changes in the relation between supply and demand. Thus demand at the new price-level equals supply. In any subsequent year a still larger volume of goods could be sold at still lower prices. Under these conditions, then, there would be no overproduction; year after year, a larger and larger output would find its way to consumers. No matter whether the gain in production resulted from discovery of natural resources, improvement in the arts, more efficient labor, better management, or any other cause, and no matter how great the gain might be, or how wide the fluctuations from year to year, or how much money consumers saved, they would always have enough left to clear the shelves, provided prices were reduced far enough and soon enough.

In this Case, however, there are no profits; in this imaginary industrial order, production is constantly increased without the spur of the profit motive. But such

an industrial order, if the main conclusions of Parts I to IV are sound, is beyond the realms of human possibility, for without the prospect of profits, the increased output would not be produced.

Case IX

Let us, therefore, introduce profits, and see whether it is possible for competitive industry, year after year, to use these profits in enlarging its output and yet, through the expedient of lower prices, sell its entire output.

Our single Corporation may help us to answer that question. Starting again with Case I, we assume that in a subsequent year the output is the same, wages are reduced by $100,000, receipts and prices are reduced proportionately, and the entire output of the previous year is sold. The Corporation now has $100,000 in profits:

Output	1,000,000 units of goods
Sales	1,000,000 units of goods
Receipts	*900,000 dollars*
Wages	*900,000 dollars*
Profits	*100,000 dollars*

Index of prices = 90

In the next year, by disbursing as wages the $100,000 which it has thus retained as profits, the Corporation produces an additional 110,000 units of goods, and sells the output of the previous year. The account for the year is:

Output	*1,110,000 units of goods*
Sales	1,000,000 units of goods
Receipts	*1,000,000 dollars*
Wages	*1,000,000 dollars*
Unsold goods	*110,000 units of goods*

Index of prices = 100

Thus the whole situation becomes exactly what it was in Case I, except that at the end of the year the Corporation has the additional output on hand. These goods constitute its entire 'profit.'

Now, if the Corporation continues to take its profit in goods, year after year, there is no reason why the volume of production cannot be constantly enlarged. The goods, however, are of no use to the Corporation; it cannot eat them, or wear them, or ride around in them; it must sell them. But it cannot sell them unless the price-level is reduced to 90+, in which case it gains nothing, since its receipts are precisely the same as when it sold a smaller volume of goods at 100. What it really does, by thus disposing of its surplus stocks through the medium of lower prices, is to distribute to consumers its 'profits' of the previous year.

The shareholders of the Corporation, it is true, could gain more than other consumers if any part of the profits were distributed as cash dividends; for their dividends would enable them to buy more goods than otherwise they could buy. But from *undistributed* profits, they could gain no more than any other consumers, no matter how these undistributed profits were used.

As a matter of fact, there is no way, under the assumed conditions, in which the Corporation or its stockholders could gain through using part of the receipts from consumers for the increase of its output — through thus, as the saying goes, 'ploughing its profits back into the business.' It could gain nothing by turning out more goods; for, if prices were maintained, the additional goods could not be sold; and if, on the other hand, prices were sufficiently reduced to move the goods, the dollar sales would be the same as before. Any one department of the Corporation could, indeed, realize profits, but only to the extent that other departments suffered losses. Clearly, then, as our Cases show, the Corporation as a whole could gain nothing by enlarging its output.

Under the assumed conditions, the same difficulty

would confront business as a whole, even if it were conducted by many corporations instead of by one. Whatever one corporation contrived to gain from the sale of a larger output would be gained at the expense of other corporations; for business as a whole there would be no profits. Consequently there would not be a larger output.

When Prices are falling Production is not increased

Under a falling price-level, as we have said, industry could sell a constantly increasing volume of goods, *if under these conditions industry could produce the additional goods*. But it could not. And that is the point of this entire chapter. Theoretically, falling prices solve all our troubles; actually, they are the beginning of new troubles. For, if there is any fact concerning which our statistical evidence fully supports our reasoning, it is the fact that falling prices put a damper on productive activity. If there is any influence that is sure to force business men to curtail output, it is falling prices and the ever-present uncertainty as to how long they will continue to fall and how far they will fall. In the real world, as we have seen,[1] prices and profits fall together, and with them falls the only motive that is powerful enough to induce men to expand production — indeed, the only practical means of doing so.

Theoretically, continuous expansion of output could be attained by means of improved processes, reduced wastes, lower unit costs, lower prices and small profits. A Case conforming to these conditions could be worked out on paper for industry as a whole, in which provision could be made for individual and corporate savings, as well as for the sale to consumers, year in and year out, of a constantly increasing output; but only because it is possible on paper to control the rate of change of costs, output and prices,

and consequently to determine profits in advance. By means of such control, it would be easy to make costs and prices fall just far enough, and each at just the right time, to effect the sale of the increased output at a sufficient profit to induce continued expansion. And this is what actually happens in certain industries, notably in the automobile industry. In the business world as a whole, however, changes in output, speculation, wages, savings, bank loans, bank balances, prices and profits are the result of the independent acts of hundreds of thousands of corporations and millions of individuals; and no one knows what all the others are doing, or what the results are going to be even a month hence. What actually happens, therefore, as we have observed again and again, is that changes in these several factors do not synchronize as they must in order to achieve the desired end. Often, on the contrary, these changes are in the wrong direction: wages are reduced when increased purchasing power is most needed; speculative stocks are dumped on the market when prices are already falling; individual savings are increased when increased spending would benefit the community; and bank loans are reduced when business is in special need of the stimulus of increased loans. If, therefore, the whole situation is left alone to work itself out in conformity to what is called 'economic law,' it is certain that, as output increases, costs and prices will not fall at the right rate over a sufficient area of industry to pass all the goods into consumption at a profit and thus maintain the expansion of output.

Moreover, even if all the factors could be controlled as readily in the markets as on paper, the best way to dispose of the output of industry would be to sustain demand at a fairly stable price-level, for a falling price-level (an appreciating monetary unit) is unjust. It is not only un-

just to all debtors, since it forces them to pay more in purchasing power than they received; but it is also unjust to all wage-earners, since it enables those who have fixed incomes from property to command a larger share of the products of labor than otherwise they could obtain.

Falling prices do not sustain business activity, if for no other reason, because they do not fall until unsold stocks have accumulated in all stages of production and distribution. In the course of time, it is true, prices fall far enough to move the surplus goods; but meanwhile the damage is done. Production is curtailed and society thereby loses a large part of what it gained when production was enlarged. Time, then, which in our hypothetical Cases we have thus far ignored, is among the essential factors of our problem. In actual markets, the 'automatic' adjustment of prices does not take place soon enough. This, then, is one of the difficulties: The only way to prevent overproduction and the resultant business depression is to reduce prices promptly enough to move an increased output as rapidly as the goods are ready for consumption; but in the actual business world prices are not reduced until overproduction is a reality, and then falling prices themselves make the depression worse.

This time-lag, however, is a minor difficulty. The greatest difficulty is that, no matter when prices fall, if they fall far enough to move an increased output, they wipe out many profits and discourage further increases in output. 'A declared policy of monetary deflation,' says Reginald McKenna, formerly Chancellor of the Exchequer, 'is a public warning to the trader that he must be prepared to lose on every contract for the future delivery of goods. Owing to the general fall in prices, the market price of goods when he gets them will be lower than at the time when his contract was made. A policy of

gradual monetary deflation, but deflation so guarded as not to interfere with production, is a policy impossible of execution.' [2] The reason is because the rate of profit for producers as a whole and for most industries, as we have shown in Chapters XI and XII, is not large even when the price-level is fairly stable; and so it takes only a moderate drop in prices to cut profits in half. Suppose, for example, that the rate of profit in a given period will be eight per cent on sales, if sales are made at the price-level at which the costs of production are incurred. Then a fall of four per cent in the price-level might entail a fall of 50 per cent in profits, which would force many producers to curtail operations.

This, then, is the chief reason why, in the real world of business, falling prices do not solve the problem of inadequate consumer demand and thus lead rapidly to higher standards of living: Although, theoretically, the lowering of the price-level would enable consumers to buy a rapidly growing per-capita output, actually such an output would not be at hand for them to buy, for there would be neither the means nor the incentive to produce it.

Public Ownership and the Economic Problem

At this point some of the advocates of Federal ownership and operation of industry may exclaim that we have proved their case. Substitute the Government for the single Corporation, they may say, produce goods 'for use and not for profit,' and the result, according to the Cases already presented, is an industrial organization of society in which nobody can gain either by curtailing output or by withholding goods from consumers; a system, therefore, which can readily distribute all that it has to distribute. But how much would it have to distribute? Not nearly enough to achieve the economic aim of society, for

without the spur of competition and the profit motive, the Government could not make constant gains in productivity.[3]

We trust that it is now clear why, in the early chapters, we took such pains to expound the function of profits and the impracticability of Government control of industry; and why, in a book on *Profits*, we are discussing the problem of adequate consumer demand. Profits are, in truth, the gist and center-point of the problem, although, as we have pointed out, the problem would remain on a smaller scale, even if there were no profits, as long as individuals saved a part of their income from wages and interest.

Summary

To sum up: Under the assumed conditions, as our Cases show, an increased volume of production cannot be sold without a fall in prices. But in a profit-seeking world, a fall in prices brings an end to increased production — an end, consequently, to progress toward higher standards of living; brings, also, those alternations of extreme prosperity and extreme depression which have long seemed inexplicable. In fact, as statistics of employment and production show throughout the world, the expedient of reducing prices, far from aiding society to advance toward its economic goal, actually throws society back for a loss. In other words, deflation brings about an adjustment of supply and demand, not by increasing consumption, which is one of the aims of society, but by decreasing production, which defeats that aim. A falling price-level, therefore, is far from being a solution of the economic problem.

CHAPTER XXVII

THE VOLUME OF MONEY AND THE ANNUAL EQUATION

THE next question is whether additions to the volume of money in circulation can solve the economic problem. Accordingly, we now abandon another of the assumptions under which we have proceeded up to this point, and consider under what conditions, if any, additions to the money in circulation may enable consumers to produce and acquire a constantly increasing volume of commodities.

Already it is clear that whether or not an increased volume of money can accomplish the purpose depends on the way in which it affects the two sides of the equation.[1] It is not sufficient for the purpose that the total volume of money be increased. The money must go into circulation in such a way that the flow of new money into consumers' hands is equal in value, at the current retail price-level, to the flow of new goods into consumers' markets. The question is not, then, whether currency or bank credit, or both, should be increased, year after year, but in what way the new money should be introduced into the circuit flow.

There is no mystery about the way in which the volume of currency is increased; the Government coins or prints it. Since, however, the expansion of bank credit is not so easily understood, it may be well for us to explain the process before we develop Cases in which that process is involved.

Bank credit is based in part on currency entrusted to

the banks by depositors. Since, however, from 80 to 90 per cent of all business in the United States is transacted by means of checks on bank deposits, it is evident that the banks lend much more than the currency that is deposited with them. As a matter of fact, above 80 per cent of the bank deposits of the country arise out of bank loans which are created by the joint acts of banks and borrowers. Usually the banks lend the money by simply crediting the bank accounts of the borrowers. Thus, when a man borrows $10,000, the bank simply writes on its books, to the credit of the borrower, the sum of $10,000, minus the discount; and the total volume of bank credit in the country is thereby *increased* by that amount. When the man pays the loan, the total volume is *decreased* by $10,000. For our present purposes, the point to bear in mind is that these transactions actually put money into circulation and take it out of circulation. In fact, wide fluctuations in the total volume of money in circulation are caused by this simple process of writing down credits and paying off loans.

Case X

To illustrate what happens when the volume of money is thus *increased* in connection with the production of goods, we first assume the business of our single Corporation to be:

Output	1,000,000 units of goods
Sales	1,000,000 units of goods
Receipts	1,000,000 dollars
Wages	900,000 dollars
Dividends	100,000 dollars

Index of prices = 100

We continue our assumption that consumers spend all they receive during the year in which they receive it, as

well as our assumption that sales dispose of the output of the *previous* year. But now, abandoning our assumption that the volume of money remains constant, we add a bank to the community, and we assume that the bank lends the Corporation $90,000, and in the process adds that amount of money to the total volume in circulation. We assume, further, that the Corporation pays out all this new money as wages, and thereby increases its production by 100,000 units. Accordingly, the statement for the year is:

Output	*1,100,000 units of goods*
Sales	1,000,000 units of goods
Receipts	*1,090,000 dollars*
Wages	*990,000 dollars*
Dividends	100,000 dollars

Index of prices = 109

In this Case, prices go up because demand (the sum of wages and dividends) rises while supply (the output of the previous year) remains constant. This is due to the time element in production, on account of which the additions to the volume of money are disbursed as wages and are spent *before* the increased supplies are ready for the market.[2] Since these supplies are in process and therefore invisible, and since the output of the previous year is sold at 109, all appears well on the surface; indeed, so well that there is every inducement to make further loans and further additions to output.[3]

Case XI

In the next year, however, when the additional supplies reach the market, the price-level must fall *below 100*, unless there is *another* increase in the volume of money; for otherwise consumers would have only $1,090,000 wherewith to buy 1,100,000 units of goods. That this is a fact

of major importance must be clear from the discussion in the previous chapter concerning the blighting effect of falling prices.

Equally important is the fact that prices cannot be sustained at the new level of 109 unless there is not only another increase in the volume of money, but *a larger increase* than in the previous year; for if the increase is the same as in the previous year, namely, $90,000, the price level drops to 107+. This fact is not readily observed, even by men who are in close daily contact with the real world of commerce and finance. It is revealed only by means of some such statistical analysis as we are making in our hypothetical Cases. It appears plainly in this balance sheet:

Output	*1,200,000 units of goods*
Sales	*1,100,000 units of goods*
Receipts	*1,180,000 dollars*
Wages	*1,080,000 dollars*
Dividends	100,000 dollars

Index of prices = 107+

In this Case, it will be noted, the price-level falls, even though all profits are distributed and all consumer income is spent, and even though the addition to the volume of money and the addition to the volume of goods are the same as in the preceding year. Let us not forget, then, that *the higher price-level which results from an increase in the volume of money, as production expands, cannot be sustained unless the volume of money is increased at an accelerating rate.*

In these two Cases we assume that the Corporation borrows $90,000 for the purpose of producing goods to be sold for $100,000. Now it is clear that if the Corporation had borrowed $90,000 and disbursed the full amount as wages, and offered the additional goods thus produced at

$90,000, and in the same unit of time, consumers would have had enough money to buy the goods. Consequently, provided consumers spent the full amount, and saved nothing, these transactions would not have disturbed the price-level. But to introduce into our Cases transactions of this sort would be merely an academic excursion; for nobody in the real world borrows $90,000 wherewith to produce commodities, and runs the risks which we have shown to be inevitably associated with such enterprises, for the sole purpose of getting back the $90,000. If to break even in this way were all the prospective borrower could hope for, he would not borrow; and in that case we should not have to wrestle with the problem of selling consumers an additional output, financed by bank credit, because there would be no such output.

From Case XI, therefore, we draw this conclusion: Whenever increased production is financed by means of an increased volume of money, and this money reaches consumers before the increased production is offered in consumers' markets, and the price-level rises — all of which is what actually happens — there is no possibility of sustaining the higher level of prices thus caused except by increases in the volume of money, which each year must be larger than those of the previous year.

Another Illustration

Our Cases show that whenever, in a profit economy, increased production is financed by means of an expansion of bank credit, this process leads eventually to a deficiency of purchasing power, even if all the borrowed money is paid as wages. Readers to whom this point is not perfectly clear may find the following additional illustration helpful.

Let us assume that a growing corporation, having

operated an automobile factory at a profit, uses all its profit to construct a tractor factory, in such a way that it returns to consumers as wages all the money which it takes from them in the sale of its automobiles. So far, evidently, the corporation has caused no deficiency of consumer purchasing power, for it has disbursed enough money to cover the sales of its automobiles, and it has not yet begun to market tractors. Still further to enlarge its business, however, the corporation uses its tractor factory as security for a bank loan, with the proceeds of which it hires laborers and constructs an aeroplane factory. Thus, it puts into circulation enough money to enable consumers to buy its tractors. They still lack money, however, wherewith to buy the aeroplanes when they are ready for sale; and they cannot have enough unless this process of pyramiding bank loans is continued, or the deficit is made up from outside sources. So the new purchasing power created through the expansion of bank credit, in connection with the loan on the second factory, although it may make the second factory useful or the third factory useful, cannot make both useful. In short, this process of financing increased output, although it creates no trouble while the new factories are getting under way, does not yield consumers enough money to buy the output when the new factories are producing at capacity. It never can, as long as goods are sold at a profit and as long as ten minus one is less than ten.

So we see that whenever, as in all these Cases, new money enters the circuit flow on the producer side, and commodities are sold at a profit, more commodities reach the markets in due course than the new money will buy at current prices. Accordingly, when consumer demand is inadequate, an increase in the volume of money may merely make matters worse; it may actually increase the

volume of unsold and unsalable stocks. No matter what the *total* flow of money may be, business expansion cannot long continue unless the *circuit* flow of money is adequate. In other words, additions on the producer side must be rightly proportioned to additions on the consumer side.

Case XII

It is equally important to observe what happens when loans are paid, and the volume of money in circulation is thereby *decreased.* Starting with Case X (page 309), we assume that during the next year the Corporation uses $90,000 of current receipts for the payment of its bank loan, and is obliged to reduce its disbursements to consumers by that amount. The result is a deficiency of purchasing power and a consequent drop in the price-level from 109 to 90+, as the following balance sheet shows:

Output	1,000,000 units of goods
Sales	*1,100,000 units of goods*
Receipts	1,000,000 dollars
Wages	900,000 dollars
Dividends	100,000 dollars

Index of Prices = 90+

This is, in fact, precisely what happens in the ordinary course of financing increased production by means of expansion of the volume of bank credit. For loans are made with the understanding that they will be paid out of receipts from the sale of the product; and when they are paid in this way, the volume of money in circulation is reduced, and a deficiency in purchasing power is thus created. The money which has been taken from consumers has not been returned to them, and is not even on its way.

The effects may be the same when receipts are used to

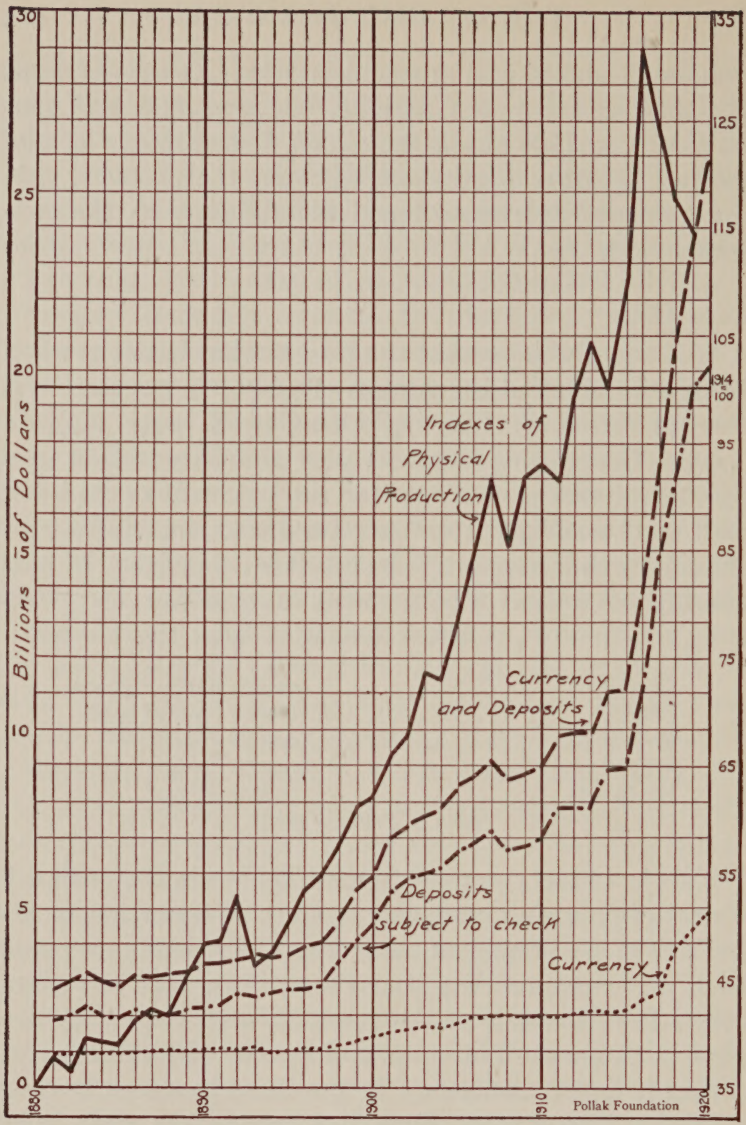


FIGURE 38. GOODS PRODUCED AND MONEY IN CIRCULATION, 1880–1920

The solid line represents a weighted combination of important indexes of physical production, with 1914 as 100. The dash line shows, in billions of dollars, the amount of money — currency and demand deposits combined — available for spending.

(Data from Willford I. King. See Table 28, Appendix)

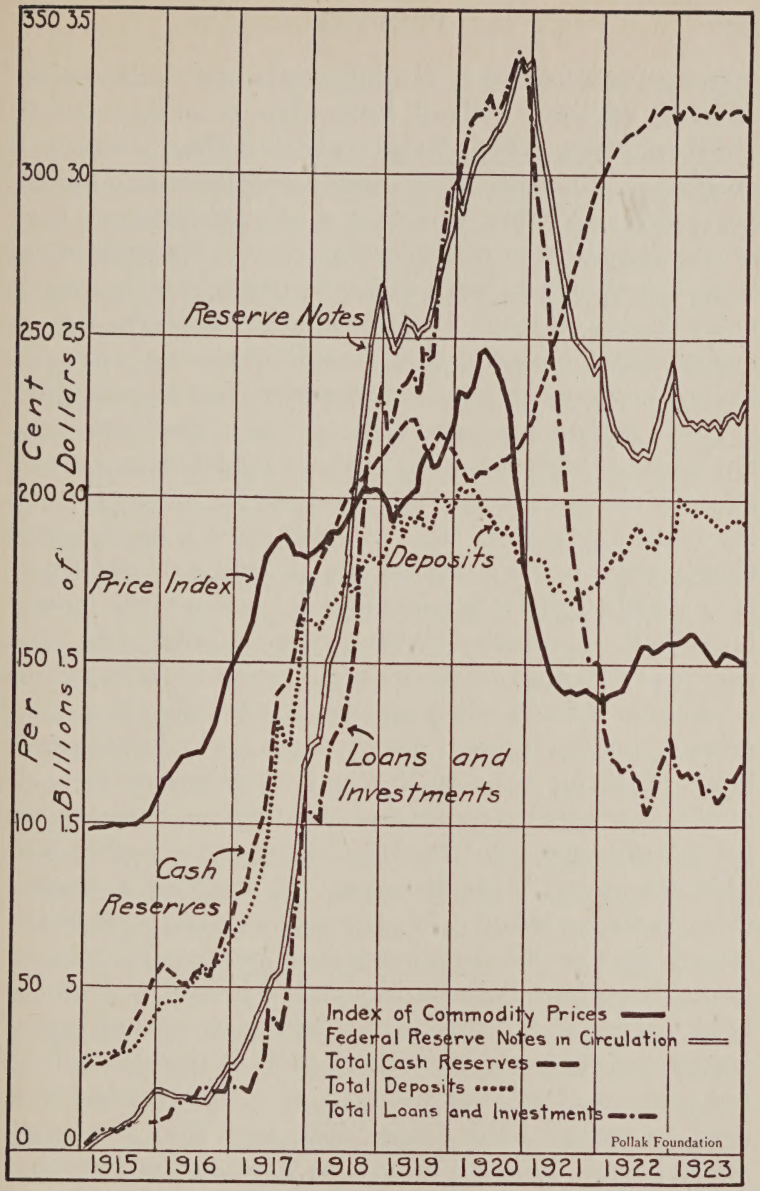


FIGURE 39. CASH RESERVES, LOANS AND INVESTMENTS, DEPOSITS, AND FEDERAL RESERVE NOTES OF THE FEDERAL RESERVE SYSTEM, AND WHOLESALE COMMODITY PRICE INDEX OF THE UNITED STATES BUREAU OF LABOR STATISTICS

increase bank balances. If additions to bank balances are offset by additions to bank loans, there is an even break; but if additions to bank balances are not offset in this way or in some other way, they cause a deficiency in purchasing power. In short, whenever a concern uses any part of its receipts from consumers to reduce the ratio of its bank balances to its loans, either by depositing the money or by paying off loans, it places on other concerns the responsibility for keeping that amount of money in circulation. They may or may not shoulder the responsibility.

It is a common error to assume that corporations cannot cause trouble by using profits to increase bank balances or to pay off bank loans, because the money is there for somebody else to use. In point of fact, as statistics clearly show (see Figures 38, 39, 40, and 44), the necessary somebody fails to come forward and put the money into circulation precisely when prices are falling and business is in dire need of the money. Jacob Viner expresses a common opinion when he says, 'It is difficult to conceive in modern times of money accumulating in the cash boxes of producers'; and 'failing such accumulations, all money coming into possession of producers must almost immediately pass on (through devious paths perhaps) to ultimate buyers.'[4] If, however, our analysis is correct, this conclusion is faulty in two respects: first, some of the money that producers receive does not pass on 'almost immediately' to ultimate buyers but is used to increase bank balances; and time, as we have shown, is an essential part of the problem; second, some of the money does not pass on at all, but goes out of existence when it is used to reduce bank loans. The fact that somebody *might* borrow it is irrelevant, as long as the fact that nobody does borrow it prevents it from reaching consumers.

Where New Money enters the Circuit Flow is the Main Question

Evidently, then, no one can understand the means of lifting business activity to higher levels and keeping it there, without considering where money enters the circuit flow, whether it is first used to produce goods or to buy finished goods, and how it affects the various price-levels of which the general price-level is a composite. Just as crop forecasters take into account not merely total rainfall but also its distribution, its time relation to crop maturities, and how much is used at once in plant growth, so business forecasters must take into account, not only increases in the total volume of money, but also its distribution, its time relation to production maturities, and how much is used at once in producing goods. It follows that monetary theory which takes account of only the *total* volume of money in circulation, the rate of increase *in general*, and the *general* price-level, is crude and inadequate, even misleading.

Overproduction may occur, no matter what the *rate* of increase of the volume of money may be. 'If it were possible,' says one writer, 'to increase the quantity of money at a rate neither more nor less than but exactly sufficient to buy the goods actually coming on the market, the crisis would never occur.'[5] That would be true, if the additional money entered the circuit flow at the right place. But the *rate* at which money is created is only part of the problem; for no *rate* whatever would achieve the purpose unless a balance were maintained between money used to buy goods and money used to produce goods. In other words, it is impossible to maintain the annual equation, in any given period of time, by increasing the volume of money, no matter what the rate of increase may be, unless during that period the increases

on the producers' side and on the consumers' side are in right proportion. For if the increase of money is too large on the producers' side, the result is an output of goods beyond the capacity of consumers to buy them. If, on the other hand, the increase of money is too great on the consumers' side, the result is a bidding up of prices which in the ordinary course of business also culminates in overproduction.[6]

It is commonly assumed that Supply and Demand 'automatically' balance

According to the usual assumption, however, the very process of financing increased production puts into circulation enough money to buy the added output, so that supply and demand must be equal. After all, it is said, 'trade is but a perfected system of barter.'[6] Again and again, we are told that although 'recourse has long been had to a process of complex barter through some medium of exchange, the final outcome is never more than the exchange of goods for goods.'[7] By thus focusing attention upon goods, and assuming that all trade is essentially barter, many people reach the conclusion that supply and demand must also balance under a money economy. An increase in the volume of goods, they declare, carries with it automatically an increase in the demand for goods. In some mysterious way — which must be accepted on faith, since it is never described except in the vaguest terms — the processes of producing a five-dollar hat are supposed to put into somebody's pocket the five dollars wherewith to buy the hat. 'There is always a demand for this additional product,' says one writer, 'because the addition to society's income enables society to pay the additional workers or machines or organizers. . . . Supply and demand are the same things, looked at

from the different standpoints of consumer and producer.' Another writer sums it all up by concluding that 'supply and demand are only phases of the same economic conditions, and it is hardly conceivable that they can ever be anything but equal.' [8]

Accordingly, it is commonly assumed that the balance of supply and demand cannot be affected by the expansion of bank credit in the ordinary course of business expansion.[9] 'Credit,' says one writer, 'has not directly affected prices simply because it has expanded with the expansion of the transactions which gave rise to it.' [10] Some members of the Federal Reserve Board are of the same opinion. 'As long as Federal Reserve notes are redeemable in gold,' said the chairman of the Board, 'and the required reserves are maintained, it is difficult to see how there can be any inflation of the currency growing out of the issue of Federal Reserve notes.' [11] 'As long as reserve balances are created,' said another member of the Board, 'and circulation is issued only against self-liquidating paper which represents things in course of production, and as long as this process is kept within a safe relation to gold, there may be more or less acute banking expansion, but there would not be any cause to call it inflation.' Others assure us that, since increased bank credit is based on increased production, this process cannot affect the relation of demand and supply. 'Any increase in the volume of money through the expansion of bank deposits,' they say, 'means an increase in the total goods and services to the credit of the community, but does not raise the price of those goods or services in any way. . . . The extent of such credit depends strictly upon the value of the goods passed on to the social capital.' [12] This assumption, which is common among bankers and business men, appears to us unwarranted.

Supply and Demand, however, do not automatically balance

What we have already said concerning the meaning of overproduction prepares us to test the validity of this assumption. We have seen that overproduction — a supply in excess of demand — is a purely monetary phenomenon, an unbalancing that could not occur in a barter economy. In barter trading the annual equation is and always must be perfect, for the measure of demand *is* the supply; demand and supply are, in fact, one and the same thing, looked at from different viewpoints. When a trader parts with a bear skin and receives a sack of corn, the transaction is closed. But when he sells a bear skin for money, he may or may not use the money to purchase a sack of corn. The exchange of goods is interrupted; indeed, it may never take place. For money is suspended purchasing power, left hanging over the markets to be used nobody knows *when*, or *where*, or *for what*. The sale of goods for money, therefore, creates the new possibility of a demand without supply or a supply without demand.

Underlying the widely accepted theory that the financing of increased production cannot cause a deficiency of purchasing power, because it 'automatically' puts into circulation the money wherewith to buy the additional output, is the assumption that the goods produced and the credit created correspond dollar for dollar, and the further assumption that the new goods and the new credit affect the markets at the same time. But, as we have seen, neither of these assumptions is warranted, for it is not true that modern trade is, after all, nothing but barter. In modern trade, on the contrary, the ordinary course of financing increased production through the expansion of bank credit, in accordance with the tenets of sound business, upsets the annual equation. The balancing of supply and demand does not take

place 'automatically,' for — as in our Cases, so in the actual business of to-day — the established and approved methods of increasing output at first yield consumers more than enough money, and presently far less than enough money, to buy the available goods at the current price-level.

When Output increases, Total Consumer Income is Deficient

This conclusion runs counter to the generally accepted view, as it is expressed, for example, by J. A. Hobson in his *Economics of Unemployment*. 'Is there any reason,' he asks, 'why the full employment at high prices, with high profits and high wages, should not continue indefinitely? Only one, namely, a failure to sell at the current high prices the whole supply of final commodities which the whole process of production is capable of putting into the markets. Now it is admitted that all these final commodities could be sold, in the sense that some one possesses the money income capable of buying them.'[13]

This is precisely what we do not admit. The fact that all the goods belong to some one does not mean that some one receives the money income capable of buying them. This is one of the fallacies that persist because of the persistent failure to distinguish between a barter economy and a money economy. It is true that all the goods belong to somebody. Consequently, if goods were exchanged solely against goods, as in barter markets, and there were therefore no such thing as a price-level, the balance of supply and demand would be perfect. The intrusion of an intermediary into the process of exchange, however, upsets the balance; for, as we have shown, the time inevitably comes in a period of expanding production when the *total* flow of money to consumers does not keep pace with the flow of goods.

Even if we could not detect the fallacy in this traditional argument, we should know that there was something wrong with it, for the tumultuous fluctuations in the price-level are conclusive evidence that currency and bank credit do not expand and contract in right relation to the expansion and contraction of goods. This is evident from all our statistics. Figure 39, for example, shows the undue expansion of money on the consumer side from 1917 to 1920 and the subsequent undue contraction. In fact, the methods whereby issues of currency and credit are now made, entirely in accord with what is accepted as sound banking practice, expand and contract the volume of money in circulation without reference to the existing surplus or shortage of consumer demand.

In short, as Figure 40 also shows, the volume of money often changes without reference to changes in the vol-

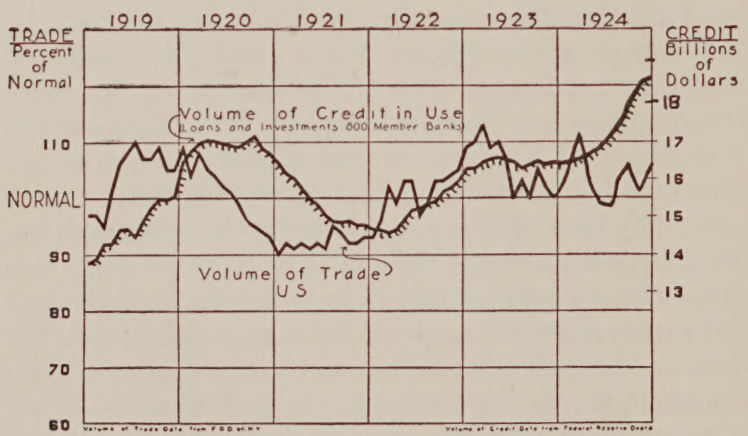


FIGURE 40. BUSINESS ACTIVITY COMPARED WITH VOLUME OF CREDIT IN USE

(The curve for volume of credit in use is made up from the loans and investments of 800 member banks. The data of the banks outside New York City are better for comparison with changes in the volume of trade.)

ume of the work to be performed by money: demand changes regardless of supply.

Consequently the established and approved methods of financing enlarged output do not 'automatically' yield to buyers enough money to acquire the output. This — not a 'consumers' strike' — is the main reason why the enlarged output cannot be sold.

The Quantity Theory in Relation to the Annual Equation

These false assumptions account for much futile contention over the question whether there is enough money in circulation to meet the needs of business. Those who maintain that there is not enough are often right; but sometimes the methods by which they would increase the volume would make matters worse. So, also, those who hold that there is too much money in circulation are often right; but sometimes the methods by which they would reduce the amount would make matters worse. Both sides overlook the fact that whether or not an increase in the volume of money would be an economic advantage depends on the place in the circuit flow where the additional money is introduced.

Disregard of this fact accounts in part for the prolonged controversy concerning the quantity theory of money. According to that theory, as it is usually stated, the price-level varies directly as the quantity of money, *all other factors in the equation of exchange remaining the same.* But other factors never do remain the same. Actually the very process of increasing the volume of money disproportionately increases the volume of goods.[14]

It follows that every plan for stabilizing the price-level by merely increasing or decreasing the total volume of money in circulation, regardless of where the money enters or leaves the circuit flow, is to that extent a defec-

tive plan. For when the volume of money is expanded in the ordinary course of financing increased production, prices rise; but any attempt to curb rising prices, by preventing this kind of expansion of money, prevents the expansion of employment and production. Accordingly, control of the price-level by merely controlling the *gross* volume of money, even if that were possible, would not achieve the economic end of society.

When men consider merely the total volume of money, they see no remedy for overproduction except underproduction. They tell us, in effect, that the way to solve the problem of distributing much more of the good things of life is not to produce them. 'What would really help to regulate trade,' says F. W. Pethick Lawrence, 'would be to begin to contract credit as soon as the stocks of finished articles unmarketed showed signs of increasing (instead of waiting as now until they have become considerable), and to begin to expand it as soon as they showed signs of diminishing. In this way both the extreme height of the boom and the extreme depth of the slump would be avoided.' [15] And in this way, we should add, every advance toward higher standards of living would promptly be checked; for whenever it appeared that consumer income was too small, it would be made smaller through wage reductions; and underproduction would follow promptly. Undoubtedly, whatever curbs fluctuations in the volume of bank credit helps to curb fluctuations in trade, but that is not enough; a dead level of low productivity is not the goal. There must be a better remedy for overproduction than underproduction.

Surely it is folly to reduce the volume of money in circulation, as we regularly do, when already consumers lack enough money to buy the available goods. There must be some way of expanding the volume of money at such times without piling up more unsold goods.

Increases in Money are mainly on the Production Side

Prevailing methods of regulating the volume of money in circulation do not serve our purpose, partly because money expands mainly on the producer side. That is to say, the expansion of bank loans does not offset deficiencies in consumer purchasing power for any length of time, since bank loans are made principally to increase production rather than to increase consumption. When, as in Case V, they are invested in new capital facilities, the first effect, it is true, is an increase in consumers' purchasing power. This is a gain, as long as the new facilities do not turn out goods of greater value than the money which has been invested in the production of the goods. It is a permanent gain if the investment is a loss; but investments in new capital facilities are made for the purpose of creating goods that can be sold at a profit; and if this expectation is realized, the result, as in Case VI, is a deficiency of consumers' purchasing power. Thus, although the first effect of new bank loans used in production is to bring new money into consumers' markets in advance of new commodities, this raises prices, makes the business outlook seem better than it is, and creates overconfidence. Thus, after a while, the expansion of bank credit for the use of producers increases the means of producing commodities out of proportion to the means of buying them.

Money expands most readily when least needed

Moreover, money expands too readily when least needed, and not at all when most needed. When consumers have more than enough money to clear the shelves of the retailers, prices rise and the volume of money expands. Everything helps the movement along. When everybody is buying, everybody is optimistic; it is more

difficult to get orders filled and more difficult to get goods transported. Therefore everybody is inclined to place larger orders, and to place them further than usual ahead of their needs. Thus, any competition at all among buyers, which begins with the mere expectation of higher prices, tends to make prices actually higher, competition keener, and speculators more eager to buy. All this involves the expansion of bank credit. The higher the prices, the greater is the demand for loans, and the higher are the dollar-values of the goods that are offered as security for loans. The larger, therefore, are the loans which the banks feel safe in making. Thus all influences work together to expand bank credit precisely when, as Case X shows, this expansion is piling up goods, in all stages, beyond the capacity of consumers to buy them at current prices.

On the other hand, money which might keep men employed and the wheels of industry moving, if it were used for that purpose, goes out of existence precisely when it is most needed. For, as soon as it is evident that demand will not be sufficient to sustain a continued rise in prices, stocks of goods are dumped on the market. Since men know from experience that great activity leads to calamities, as soon as they see a storm brewing they throw goods overboard in an effort to avoid being shipwrecked. Many speculators cannot do otherwise; having used bank loans to purchase goods, they are forced to market the goods under pressure from the banks for payment of the loans. The banks also have little choice; they must protect themselves. The change of facts itself forces them to act; the security upon which the loans were originally made is there in goods, but not in money values. The net result is that prices fall, many bank loans are paid, comparatively few new loans are made, and thus, as in Case

XII, the volume of money in circulation is contracted. (See Figures 39, 40 and 44.)

At the same time, nearly all manufacturers reduce their scale of operations; and since reduced payrolls and reduced purchases require less money, they pay some of their bank loans, and thus cause a further decrease in money in circulation. Whatever the initial causes may be, these decreases further reduce prices and volume of orders; which reductions, in turn, lead to further decreases in employment and the flow of money to consumers, precisely when increases in both are most needed.

Thus a period of prosperity comes to a close largely because industry is not financed in such a way as to place enough money in the hands of consumers. When this deficiency culminates in a depression, the only way in which bank credit can supply the lack of circulating purchasing power is through loans made by somebody; but at such a time nobody cares to risk losing his whole business through incurring new debts for the purpose of making goods that may have to be sold at a loss. The banks are powerless; bank credit is not created without borrowers. The individual producer could help the general situation *temporarily* by using the proceeds of a loan to hire unemployed men, thus immediately putting more money into circulation; but most of it would be used to purchase other men's products. At such times, bank borrowing that is good for business as a whole is good for the individual only if others also borrow; but business depression does not induce prompt group action. This is the dilemma: most producers do not feel safe in using bank credit to resume or extend their business until there is a considerable increase of purchasing power in daily use; but there is no considerable increase until producers use bank credit. In any event — and this is the permanent

trouble — they cannot go far in using bank credit to expand operations without bringing on another depression.

One great merit of the elastic feature of our Federal Reserve System is said to be that it responds quickly to the needs of business. As a matter of fact, when prices are rising it responds too readily to the pressure of business for loans, but when, in due time, this expansion of bank credit has increased the money used in production out of proportion to the money that is available for use in consumption, the volume of bank credit quickly contracts. Thus bank credit expands most readily when, for business as a whole, expansion is most injurious; and it contracts most readily when, for business as a whole, expansion is most beneficial. And at all times it looks mainly to the needs of producers, as though business had no concern over the needs of consumers. These evils, as we have said elsewhere,[16] were not introduced by the Federal Reserve System: they existed under the old banking system. Indeed, the shortcomings of the old system, the panics which it was powerless to avert, and the superior features of the present system are well known. Our purpose is not to contrast the Federal Reserve System unfavorably with any of the systems of the past, but to call attention to some of the monetary problems that are yet to be solved.

As a matter of fact, nothing we have said in this volume can properly be construed as an adverse criticism of the policies of banks. We are endeavoring to analyze the workings of the industrial system of which the banks are a necessary part, and for the main defects of which they are in nowise responsible.

Money does not expand readily on the Consumer Side

Although the volume of money expands readily to

meet the needs of producers, it does not expand readily to meet the needs of consumers. Loans made by banks and insurance companies to be used in the purchase of consumables are relatively small.

The capacity of consumers for acquiring goods can be increased temporarily, it is true, as in Case IV, through the mortgaging of future incomes, a method of selling goods which sometimes involves the expansion of bank credit. Consumers are thereby enabled in a given year to buy more houses and furniture and automobiles than otherwise they could buy in that year. But this device will not enlarge or even sustain sales *in the following year*, unless incomes are mortgaged still further into the future; and this process cannot go on forever. The expansion of bank credit in order to enable consumers to acquire cars on a 'five-dollar-a-week plan' may cause an immediate expansion of sales, but it cannot long sustain sales at the new level. Consequently, this device, although it obscures the deficiency in consumer purchasing power, does not lessen it by a single dollar. On the contrary, it adds to the deficiency; for purchases made this year on installment plans give producers exaggerated ideas concerning future demand, and prompt them to an unwarranted expansion of output.

Changes in the Velocity of Money do not help Matters

So far in our Cases we have assumed that both the velocity of money in general and the circuit velocity remain constant. It is now clear, however, that we may discard that assumption without discarding our conclusions. For a change in the rate of flow of money in general, so long as it flows in the same channels, changes the outcome in degree but not in character. If money, changing hands at a certain velocity, causes a deficiency in pur-

chasing power, money changing hands at a greater velocity could cause a greater deficiency. So, also, a change in the circuit velocity of money, if the money moves around the circuit in the same channels, does not help to reduce surplus stocks. For if money moves faster in the same channels, the result is a corresponding acceleration of the flow of finished goods to markets, and consumers' income is, therefore, as far short as ever. Other things being equal, doubling either the velocity of money in general or the circuit velocity, doubles the deficiency. If, however, money flows more rapidly from consumer to consumer, because of short circuits by means of which money is used twice in succession to buy consumers' goods, the result is a gain on the consumption side of the equation.

In any event, changes in the velocity of money would not help to sustain sales in time of greatest need, for it is precisely at such times, as in 1920–21, that velocity falls off.[17]

The Question is whether the Currency shall be managed intelligently

Theoretically, then, it is always possible to add to the volume of money in circulation in such a way as to benefit the community. The only question is how the new money is used in the first instance. Theoretically, both the volume of money and the volume of goods can be increased indefinitely, without a change in the price-level, if the increase on the consumption side is rightly proportioned and rightly timed to the increase on the production side. An accurate retail price index would itself measure the success or failure of industry to maintain this right proportion.

In any conceivable situation, therefore, an all-wise despot could make a net gain for the community by in-

creasing the volume of money in circulation either for the purpose of producing goods or for the purpose of buying goods. Whenever he increased the volume in such a way as to add finished goods to the markets and at the same time to add just enough money to consumers' incomes to bring about the sale of the increased product, the community would gain; and this would be possible at any stage of business fluctuations.

But a despot is not necessary; an intelligent democracy will suffice. For, obviously, the Government now has all the power that it needs to accomplish the purpose. It lacks only knowledge and experience. If any safe and practicable means could be devised, in connection with increased public works and decreased taxes, or in any other connection, of issuing just enough money to consumers to provide for individual savings and to enable them to buy an enlarged output, and if business men were confident that issues to consumers would continue at this rate and at no other rate, there would be no drop in the price-level and no reason for curtailing production, but on the contrary, the most powerful incentive for increasing production. The relation of Government finance to the annual equation, however, is the subject of a later chapter.

Unfortunately, as we have seen, the volume of money is now increased in the ordinary course of business in such a way as to overthrow this balance. For fluctuations in the volume of money are now determined by the independent acts of thousands of bankers and thousands of bank borrowers, few of whom know much concerning the effects of their acts on others, and no one of whom has any responsibility for the general situation. Each is quite properly concerned with the needs of his own business,

rather than with the general and faraway problem of maintaining the annual equation.

Society, therefore, must devise measures for controlling the volume of money in its economic interests. The question at issue is not whether it is best to have a 'managed currency,' since every currency is necessarily a 'managed currency.' The sole question is whether currency shall be managed intelligently.

CHAPTER XXVIII

GOVERNMENT FINANCES AND THE ANNUAL EQUATION

UNDER the assumed conditions, then, the people cannot possibly obtain enough money to buy an increased output without a fall in prices and a consequent decrease in output. But since the assumed conditions take no account of Government income and expenditures, the question remains whether the financial operations of governments to any extent offset deficiencies in consumer purchasing power which are caused by the financial operations of private enterprise. That is the question we now purpose to discuss — not problems of taxation in general, or the desirability of lower taxes, or considerations of justice, or political expediency, or economy — but solely the effect of Government receipts and disbursements on the annual equation.

Large amounts are involved. No longer do we have what now seems the paltry $639,000 appropriated in the first year of Washington's administration, but many thousand times as much. In the War year, 1918, Federal appropriations were in excess of 25 billion dollars. Even in the year 1923, public expenditures — Federal, State, and local — were above 10 billion dollars, an amount equal to 15 per cent of the total national income for that year. The large expansion of Federal expenditures in 1918 and since has been financed, as Figure 41 shows, mainly by means of large increases in taxes on income and profits.

The question before us is how these vast receipts and expenditures affect the relation between the flow of goods

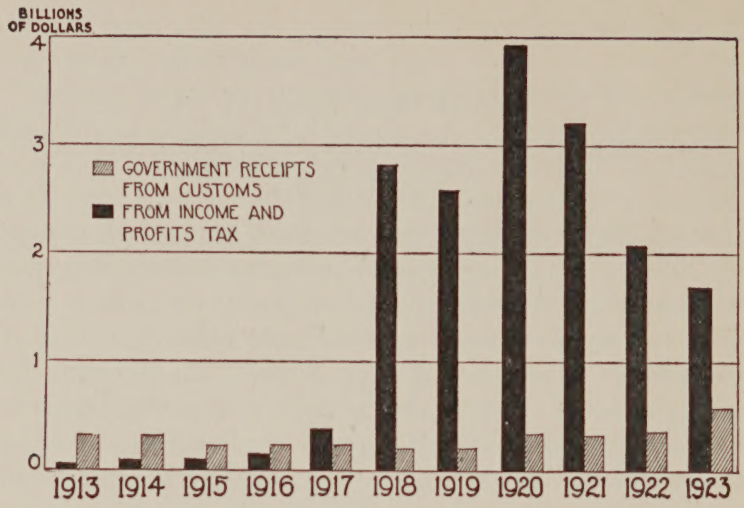


FIGURE 41. GOVERNMENT RECEIPTS FROM CUSTOMS, INCOME TAXES, AND PROFITS TAXES

into consumers' markets and the flow of dollars into consumers' hands. Does the collecting of taxes and the borrowing of money by governments and the spending of the proceeds make the situation better or make it worse?

Taxes do not cause Deficiencies in Consumer Demand

First, we should note that there is no way in which Federal taxes can add much to the deficiencies in consumer demand which are caused by private enterprise. At first, this may seem difficult to believe, since there is a distressing lot of evidence on every hand that the Government is constantly taking money from taxpayers which they would gladly spend in the markets. There is, indeed, a widespread conviction that high taxes are responsible for the failure of consumer demand to keep pace with production during the past decade. Alarm is frequently excited by the rapidly increasing proportion of the

national income that is absorbed by Federal, State, and local governments. No wonder, it is said, that people cannot buy more goods than they do, when taxes take so much of their money.

A little thought, however, will make it clear that taxes have virtually nothing to do with deficiencies in consumer demand, since nearly all receipts from taxation are spent by governments in such a way as to put the money into the hands of consumers without putting commodities into consumers' markets. This is necessarily the case, since governments ordinarily produce very little that is offered for sale. They 'throw monkey wrenches into the machinery' of business, to be sure, but not into the markets. In fact, they do not use the money which they take from consumers to increase the *supply* of lamps, or dolls, or biscuits, or any of the other commodities which consumers are expected to buy. The immediate effect of Government expenditures, therefore, is almost entirely on the *demand* side of the equation.

This matter is so important in connection with the problem of sustained consumer demand, and yet so little understood, that we venture to enlarge upon it. The point is that nearly all Government revenues flow into the hands of buyers of finished products and are spent by them in consumption before they are invested in production. That is the sense in which funds spent for schools, libraries, warships, sewers, salaries, and pensions are 'unproductive' expenditures. For the most part they are not used to produce anything which is offered for sale. These funds, coming as they do partly from people who would have used them in buying consumables, and going as they do almost entirely to people who actually do use them in buying consumables, leave the situation no worse than before. In short, since nearly all that is taken from con-

sumers in taxes is returned to consumers, without in the meantime having been used to put consumers' goods on the markets, taxation does not account for a shortage in consumer demand. It reduces the demand of some people, to be sure, but not the demand of the people as a whole. It affects the distribution of purchasing power and therefore the *character* of demand, but it cannot cause a permanent deficiency in the *volume* of demand.

For a few months, no doubt, *increased* taxes may make total consumer demand less than otherwise it would be, since the process of collecting and spending the additional money takes time. Such a process, which at best would take some time, takes under public control a good deal of time, since governments are notoriously slow and unbusinesslike in money matters. It is not unusual for public expenditures to be delayed for months; and sometimes they are delayed for years, while politicians discuss appropriation bills. Thus an increase in taxes, by increasing the circuit time of money, may cause a temporary shortage of demand in consumers' markets, unless counterbalanced by government borrowing or printing of money in anticipation of taxes.

This shortage, however, is only temporary; it is almost entirely if not entirely offset as soon as the governments spend the additional revenues. Consequently, increased taxes do not permanently decrease the volume of consumer demand.

Ordinarily Government Expenditures do not offset Deficiencies in Consumer Demand

Since, then, taxes cannot *cause* permanent deficiencies in purchasing power, the next question is whether there is any way in which the collection of taxes and the use of this revenue by governments can *offset* deficiencies in

purchasing power which are caused by private enterprise. The answer to this question is already clear: In so far as governments take money from consumers and return it directly to consumers, or themselves use it in consumption, *without in the process causing changes in the volume of money in circulation*, they do not thereby change the volume of demand for consumers' goods. Consequently, they do not *offset* existing deficiencies in demand.

At times, however, taxation does occasion changes in the volume of money in circulation. The money wherewith to pay taxes is sometimes obtained by means of bank loans which involve expansions of bank credit that otherwise would not have occurred. As soon as this new money has passed through official channels, most of it appears in the markets as increased consumer demand. But this gain is only temporary, unless the expansion of bank credit in question is permanent; and it is not likely to be permanent, since banks seldom lend money to enable borrowers to pay taxes except when it seems certain that the borrowers will soon obtain the money, directly or indirectly from consumers, wherewith to pay the loans. When the loans are thus paid, the original gain is offset by a loss. Only in small degree if at all, therefore, do such loans make up for the insufficiency of consumer demand that is caused by private enterprise.

So much for taxes; but governments derive their funds from loans as well as from taxes. The loans of banks to Federal, State, and local governments, as we have already observed,[1] are now above six billion dollars. Governments also borrow directly from individuals — sometimes, as in the case of the Liberty Bonds, in very large amounts. The question is whether the conclusions which we have just drawn concerning taxes apply as well to loans.

First, we may consider loans which are made by consumers, directly or through the agency of banks and insurance companies, from money which is already in circulation. Evidently, such loans to governments cannot offset deficiencies in consumer demand, since governments do not turn over to consumers any more money than they borrow from consumers. Neither can such loans create deficiencies in consumer demand, since governments disburse nearly all that they borrow in unproductive ways. In other words, when governments borrow from consumers at home money that is already in circulation and give it back to consumers at home, without using it meanwhile to add stocks to home markets, these borrowings have little influence either on demand or on supply. And for the most part this is precisely what happens. To the individual citizen it does, indeed, make a great difference whether he pays taxes or buys a bond; but it makes little difference to the markets. In short, Government loans, as well as taxes, in so far as they cause no changes in the volume of money in circulation, can neither offset a deficiency in consumer demand nor create one.

When, on the other hand, the money wherewith to buy Government securities is obtained by means of the expansion of bank credit, the result is an increase on the consumer side of the volume of money in circulation. This is what happened during the World War. In fact, the slogan of the Liberty Bond campaigns was 'Borrow and Buy Bonds'; and the use of the bonds themselves, as security for bank loans wherewith to buy more bonds, caused an expansion of money which was first used to take goods off the markets. This would have helped to offset deficiencies in demand had there been any deficiencies; but since at that time demand was outrunning supply, the result was a rising price-level.

It should be observed, incidentally, that it makes no difference to the annual equation how effectively the Government spends the money which it receives as loans and taxes. All we have said so far applies as well to money usefully employed by governments as to money wasted. It applies to money spent on the Smithsonian Institution no less than to money spent on worthless canals. What we have said does not apply, however, to that exceedingly small proportion of Government expenditure which actually brings about an increase in the volume of goods which are sold to consumers.

Adjusting Public Expenditures to Trade Cycles does not offset Deficiencies

It is sometimes said that the best way to offset deficiencies in consumer demand is for Government agencies to maintain larger reserve funds, and to increase their payrolls out of these funds when price indexes reveal a falling off in consumer demand, and *vice versa*. Such a policy is, indeed, thoroughly sound.[2] It helps to curb fluctuations in the price-level and in the volume of trade, for it adds to consumer demand when additions are most needed. Nevertheless, many business men opposed this policy when, in the inflation period of early 1923, Secretary Hoover proposed that the Federal Government should spend less money in competing with private business for labor and materials. 'Shall we forever go seeking to break down activity,' asked the *Manufacturers' Record*, 'every time the Nation strikes a stride to prosperity?'[3] Such objections are based on a misconception of the effects of public finance upon business. The curtailment of public expenditures in that active period, in order to make larger expenditures possible when demand began to fall off, did not hurt business in the long run.

It merely served to narrow the range of the advance and subsequent decline of activity. It was, therefore, a blessing to business.

It must be clear, however, from what we have just said about the sources and uses of public revenue, that this policy of adjustment could not permanently make up a single dollar of deficiency in consumer demand. It must be equally clear that the Government could not long have sustained the advance of the spring of 1923 by any use whatever of public funds which did not involve increases in the total volume of money in circulation. For, as we have just observed, the expenditure by the Government of all that it receives within a given period has virtually no effect either on supply or on demand. Merely adjusting Government expenditures to business fluctuations, therefore, although it tends toward stability, does not permanently increase consumer purchasing power. Since it merely distributes a given outlay more evenly over a series of years, it does not in the long run offset deficiencies in demand.

Sometimes, however, they are partly offset or more than offset by increases in Government expenditures which involve permanent increases in the volume of money in circulation, whether the money comes from banks or from printing presses. Indeed, it may be in this direction that ultimately the solution of the problem of adequate consumer demand will be found.

The entire analysis of Government finance up to this point brings us to this conclusion: If we had introduced public loans and taxes and disbursements into all our Cases, strictly in accord with what actually takes place in time of peace, we should not thereby have invalidated any of our conclusions. In point of fact, Government re-

ceipts and expenditures ordinarily have little to do with *causing* deficiencies in consumer income, or with *offsetting* deficiencies caused by private enterprise.

Moreover, our indexes of business conditions offer no evidence that the failure of business to expand more rapidly and more steadily in recent years has been due to high taxes, to the diversion of funds into tax-exempt securities, and to a consequent dearth of capital for private enterprise. Certainly high taxes and unprecedented Government expenditures did not prevent growth in capital facilities, in new enterprises, and in volume of trade, during the years just before the collapse of 1920. Nor did these causes prevent a marked expansion of business in the twelve months prior to the spring of 1923. During this period, at least, taxes and tax-exempt securities did not prevent rapid growth in the volume of production, the volume of employment, and the volume of trade. Seldom has the country reached such heights of industrial activity.

The extraordinary activity of the first quarter of 1923, it is true, was not sustained. Neither was there a general slump in business. The net result of the forces that were brought to bear at this time was a year of what is regarded as good business. The physical volume of trade, all branches included, was 'nine per cent above normal'; freight-car loadings broke all records; employment, wages, trade, and profits were sustained, in general, above normal.[4] All this, every one must admit, happened after several years of high income taxes and while tax-exempt securities were being issued to the value of not far from a a billion dollars a year. The statistics for the year 1923, therefore, do not support the contention that the diversion of investments to these securities hurt business.

Nevertheless, it is true that business receded, during

the middle of 1923, from the heights attained in the first quarter. Was this recession in fact caused by lack of capital facilities? This explanation does not seem reasonable, since the capital facilities which carried the volume of manufactures to 17 per cent above normal early in 1923 were nearly all available throughout the year. Was the recession, then, due to lack of funds for the expansion of private enterprise, caused by the fact that income-tax rates favored investments in tax-exempt, public securities? This is a common explanation, but it is not convincing. It fails us, first, because it does not explain why the assumed cause suddenly became effective early in the spring of 1923, after it had been in full force for several years; second, because it does not explain why business recovered later in the year, while the assumed cause was still in operation. This explanation fails us, finally, because it is inconsistent with the facts. The growth of business was not impeded early in 1923 by credit conditions, for there was no stringency in the money markets. (See Figures 42, 44, and 45.) It is true that three of the Federal Reserve banks raised their rediscount rates one half of one per cent; but commercial banks for the most part were not dependent at that time on the Reserve banks, and the prevailing rates on commercial paper were not high enough to cause a recession in business. They were, in fact, much lower than the rates under which business expanded rapidly in 1919. Moreover, the reserve ratio was high. In spite of the fact that twelve billion dollars had been invested in tax-exempt securities, there was still plenty of money available for every legitimate business, at rates that were not prohibitive.[5] For these three reasons, it appears that the marked business expansion of early 1923 was not curbed because high taxes had driven capital into unproductive enterprises.

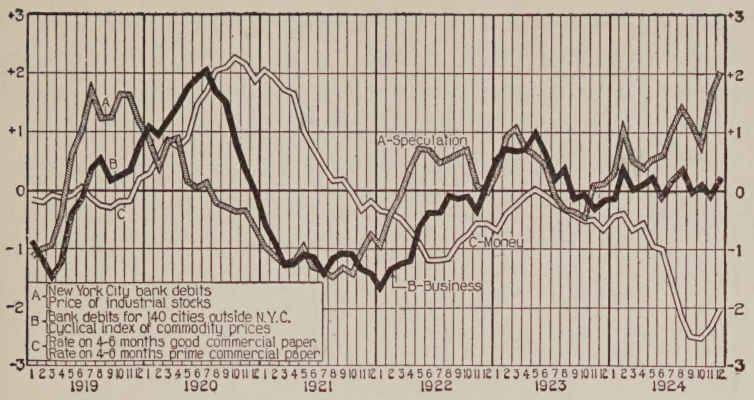


FIGURE 42. INDEXES OF SPECULATION, MONEY, AND BUSINESS, 1919–24
(From Harvard Committee on Economic Research)

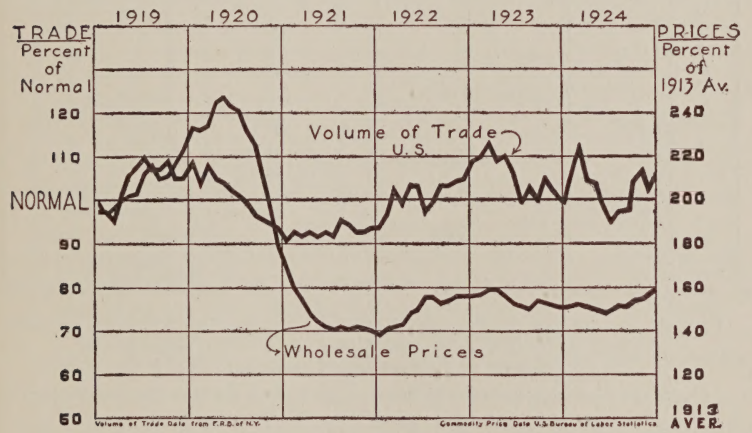


FIGURE 43. VOLUME OF TRADE COMPARED WITH WHOLESALE COMMODITY PRICES

(Volume of trade data from the Federal Reserve Bank of New York; price index from the United States Bureau of Labor Statistics; chart from the Federal Reserve Bank of Boston)

As a matter of fact, the volume of new capital issues of corporations has increased along with the volume of taxes and tax-exempt securities. For the five years,

1919–23, new capital issues averaged about four and one half billion annually, whereas the average for the five years, 1912–16, when taxes were very low (see Figure 41), was less than two billion. From the close of the War until the end of 1923, average annual domestic issues, exclu-

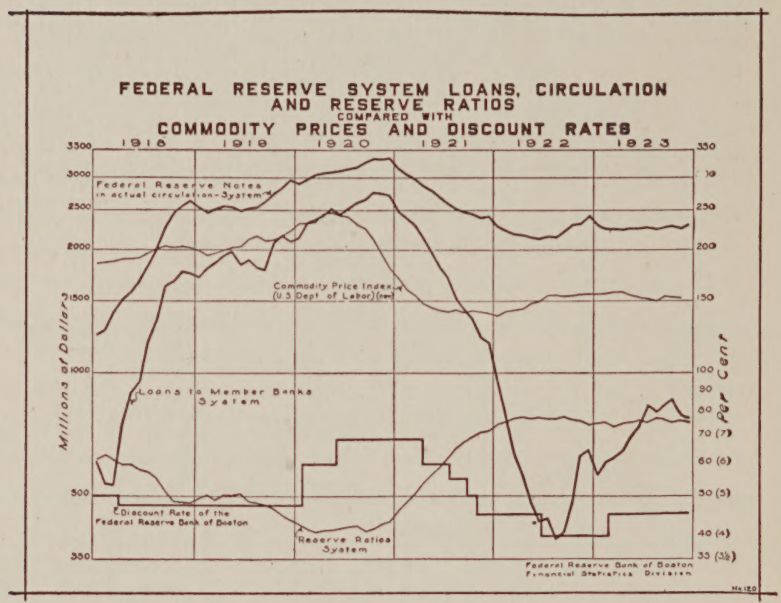


FIGURE 44. LOANS, NOTE CIRCULATION, AND RESERVE RATIOS OF THE FEDERAL RESERVE SYSTEM COMPARED WITH WHOLESALE COMMODITY PRICES AND DISCOUNT RATES
(From the Financial Statistics Division of the Federal Reserve Bank of Boston)

sive of refunding issues and foreign loans, were about half a billion larger than total issues of all kinds before the War. Moreover, the authorized capitalization of new enterprises chartered in the Eastern States averaged for the years 1919–23 more than ten billion; whereas the average for the years 1910–15 was less than two billion.[6] There is nothing in all these statistics to bear out the con-

tention that high taxes and tax-exempt securities caused a dearth of capital and timidity of business enterprise.

And yet, in the face of all these facts, the argument most commonly advanced against high taxes in general, and against surtaxes and excess profits taxes in particular, and the consequent increase in tax-exempt securities, is that such taxes cause a dearth of funds available for private enterprise and injuriously curtail the growth

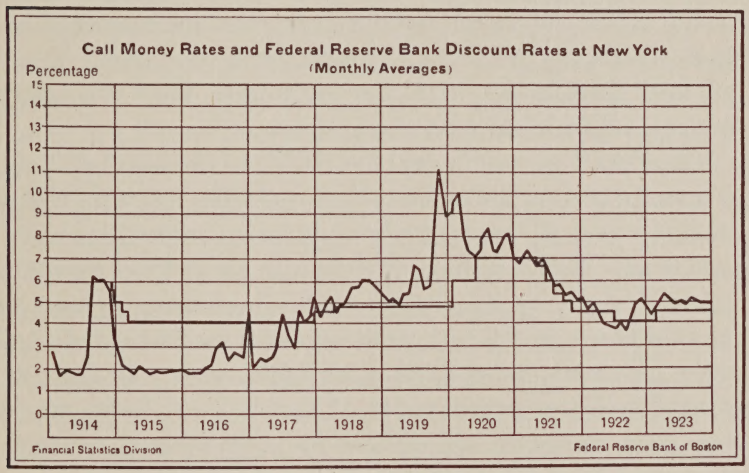


FIGURE 45. CALL MONEY RATES AND FEDERAL RESERVE BANK DISCOUNT RATES AT NEW YORK
(From the Financial Statistics Division of the Federal Reserve Bank of Boston)

of capital facilities. In this way, says one economist, 'private industry has been seriously handicapped.' [7] 'Tax-exemption,' says another economist, 'disturbs and even imperils general industry.' [8] 'High surtaxes,' adds the Secretary of the Treasury, 'have a discouraging effect on business expansions and new undertakings.' [9] 'It is impossible,' says one business man, 'for the methods of individualism, on which our economic, social, and polit-

ical system is based, to function adequately if both the growth of capital resources needed for industry and the reward of effort and risk continue everlastingly to be curtailed as drastically as they are curtailed under the existing scheme of taxation.' [10] Another business man urges a reduction of taxes that 'will return diverted capital to business channels,' and thus 'supply much needed housing and commodities not now produced in quantity sufficient to meet demands.' [11] A member of Congress sums up the all but universal opinion, when he declares that by thus 'diverting the flow of capital from its normal channel and interfering with our economic life,' we bring 'great economic evils on the country.' [12]

What shall we say in reply to all these contentions? At this stage of our argument there remains but one thing for us to say. If we are right, all these contentions must be wrong. If the failure of industry to yield consumers enough money to buy a constantly increasing output is the real cause of the failure of business to continue to expand, the real cause cannot be high taxes. If existing capital facilities are capable of turning out more goods than consumers can buy, this — not high taxes or a dearth of capital funds — is the real reason why business men do not create new capital facilities at a faster rate. The tragedy of the prevailing confusion in economic thought is this: The more widely and persistently men focus their attention on bogus causes of business anæmia and futile remedies, the longer it will be before they turn to measures which offer any hope of a cure.

The Tax Laws may have moderated Business Depressions

We have just referred to the contention that, had it not been for our discouraging tax laws, there would have been greater growth of industrial equipment and output.

This contention brings us back to our central theme; for if there had been greater growth, the excess of goods over consumer income would have accumulated even more rapidly. Consequently, business setbacks, like that of 1923, might have been depressions.

This conclusion seems to follow from the effect of tax-exempt securities on the relative flow of money to consumers and of goods to consumers' markets. The value of wholly tax-exempt securities outstanding appears to be in excess of twelve billion dollars, a large part of recent issue. This means that during the years 1920–25, several billion dollars were disbursed by the Federal Government, by States, by counties, and by cities, in unproductive enterprises. The result was to turn over several billion dollars to consumers without in the process adding appreciably to the stocks in consumers' markets. For the billions that were spent for roads, sewers, municipal buildings, and the like were not used, as otherwise they might have been used, to increase the supply of shoes, pianos, and tires. Had the amount of money spent in production of consumers' goods during the years 1921–25 been as high as usual, in relation to the amount spent in public works, the problem of sustaining business would have been more serious. Instead of moderate declines, there might have been a collapse.

Although increased taxes may thus check the growth of output, when output is overreaching the possible market, increased taxes are nevertheless objectionable. They are objectionable mainly because the right remedy for overproduction is not smaller production but larger income. Moreover, increased taxes entail evils of their own: for since the people collectively spend their money more wastefully than they do individually, a large increase of

Government initiative and responsibility at the expense of individual initiative and responsibility is economically harmful. Society, therefore, should devise better methods of dealing with the problem of deficient consumer demand than constant increases in public expenditures.

What we have said is not offered as an argument in favor of tax-exempt securities and increased taxes. Far from it. It is offered merely to show: first, that it is impossible, in a money and profit-making economy, to continue such an expansion of production as occurred in 1922 and 1923 unless individual income somehow manages to keep pace with output; second, that the unprecedented volume of tax-exempt securities during those years may have made the lag of income behind output less than otherwise it would have been; and third, that if taxes are reduced and no more tax-exempt securities are issued, and if this really does divert a half billion dollars a year from unproductive enterprise to productive enterprise, the result may well be a still greater discrepancy between the flow of goods and the flow of income, and a consequent business depression. All the more important, therefore, in view of the great and constant uncertainty that surrounds tax legislation, is the effort to discover the best means of maintaining adequate consumer income. What the best means are is too large a question to be dealt with here. The fact that this is the great economic problem is all we can hope to demonstrate; and that is enough for our present purposes.

We trust, however, that our discussion of Government finance, inadequate as it is, leaves no doubt that public fiscal policies must figure largely in any study of the possibilities of sustaining consumer demand. Many people, it is true, do not agree with us. They contend that the purpose of taxation is not to help business, but

to raise revenue; and the purpose of expenditures is not to help consumers, but to run the Government. Therefore, they conclude, taxes should be levied and the proceeds disbursed without reference to the requirements of sustained business prosperity.

As a matter of fact, however, there is no possibility of separating business and the Government. The interrelations are necessarily so numerous and so complicated that the Government can take no important step in any direction, or even talk of taking one, without affecting business. In particular, it cannot collect or expend money without having some effect, even though it may be only temporary, on the balance of consumers' goods and consumers' income. Indeed, as we have seen both at home and abroad, changes in the volume of money in circulation made by governments may have more effect on business than all other causes combined. Not only is it sound policy for the Government to administer taxes and expenditures with a view to adequate purchasing power of consumers, but there is, in fact, no guide to fiscal policies so important as this; for upon sustained purchasing power economic prosperity depends; and upon economic prosperity the sources of taxes depend.

Political activities are, in fact, only one phase of community life. Individuals as a group conduct the Government of the Nation, while the same individuals conduct the business of the Nation; and they cannot intelligently neglect one essential phase of their life while looking out for another. They should direct their fiscal policies, including currency measures, the Federal Reserve System, taxation and disbursements, not toward limiting production to available consumers' demand, but rather toward sustaining consumers' demand on a level with available production.

CHAPTER XXIX

OTHER FACTORS AND THE ANNUAL EQUATION

BEFORE considering the effect on the annual equation of other factors and the main objections that have been offered to our theory, we here briefly summarize what we have said so far.

SUMMARY OF PRECEDING CHAPTERS OF PART V

From the analysis of the prevailing industrial order which we presented in *Money*, and which we have further developed in this volume, it appears that periodic business depressions, with the inevitable accompaniment of unemployment, reduced production, and lower standards of living, are caused fundamentally by the failure of consumers' income to keep pace with output. From our Cases this deficiency appears to be the certain result of the use of corporate savings to increase the volume of production. Our Cases also show that individuals, as well as corporations, occasion this shortage of demand for finished products, in so far as they, too, save money in such a way that it brings about the production of goods before it is used in the consumption of goods, and in so far as the resultant shortage is not offset by factors yet to be considered. If these factors do not make up the deficiency, there appears to be no escape from the conclusion that industry cannot realize profits without defeating the economic aim of society, unless all profits and all other receipts from consumers are promptly returned to consumers, and unless consumers promptly spend all that they thus receive. Yet, in the real world, both individuals and corporations must save.

We have seen, further, that stocks which thus pile up beyond the capacity of consumers to buy them at current prices are not sold promptly through the expedient of falling prices, since prices do not fall rapidly enough to achieve the purpose. In any event, falling prices do not provide a way out of the difficulty because there is no possibility of making prices fall at exactly the right rate, and in right relation to costs, to sell the current output at a sufficient profit to enable producers to continue enlarging the output. Actually, in the vicious spiral of deflation, reduced prices mean reduced production, reduced production means reduced wages, reduced wages mean reduced consumer income, reduced income means reduced demand, reduced demand means still lower prices, leading to further curtailment of output, and so on. Thus, in a period of falling prices, society finds itself receding farther and farther from its economic goal.

So, also, it appears that the conclusions drawn from our simplified Cases still hold, even after full account is taken of changes in the volume of money; since, in the real world, additions to the volume of money are made very readily on the producers' side, but not at all readily on the consumers' side, with the result that, whenever the volume of money is increased in accordance with the established and approved methods of financing increased production, the result in due time is an even larger deficiency in consumers' purchasing power than before.

Finally, we observed that government expenditures, in so far as they are financed by means of taxes and loans which do not involve an expansion of the volume of money in circulation, do not offset in any degree the deficiencies in purchasing power which are caused by private industry; since, even if governments returned to consumers every dollar taken from them without in the process add-

ing stocks to the markets, the relation of supply and potential demand would be precisely the same as before.

Our entire analysis up to this point, therefore, leads us to conclude that, unless there are offsetting factors yet to be discovered, the methods of financing increased output in the actual business world, far from 'automatically' inducing a corresponding flow of money to consumers, actually prevent them from obtaining enough money to buy the increased output. Thus prosperity itself generates depression. And thus, in the trough of depression, before another advance is well under way, society loses a large part of what it gained on the way to the crest, and so finds it impossible to make the substantial, sustained progress toward raising the general standard of living which otherwise could readily be made.

The question remains whether any of the outside sources of income which we have not yet considered offset the deficiencies which are caused by business enterprise and by the savings of individuals.

Other Sources of Income do not offset the Deficiency

Are they offset, for example, by increases in the money in circulation which result from the production of gold at home and the importation of gold from abroad? Or is it possible that even during a period of prosperity the losses of some concerns offset the deficiencies caused by the profits of other concerns? Clearly not. The available statistics show that these sources of purchasing power are insufficient, in a period of increasing activity, to make up for the discrepancy between the goods produced and the money disbursed to consumers in the process.[1]

Foreign Trade does not overcome the Deficiency

There remains for consideration a difference between

our hypothetical Cases and actual commerce which may seem at first thought to be a crucial difference; for we assumed that our single Corporation does not trade outside the borders of its own domain, whereas in the real world every nation carries on foreign trade. This fact, however, does not invalidate our conclusions; for the world is in reality precisely such a self-contained and self-sustaining economic unit as our imaginary Corporation.

Any one nation, it is true, may offset the deficiency of purchasing power at home by sending its surplus goods abroad to people who do not pay in goods. But this device, although it may relieve the situation in certain countries, does so only by making the situation worse in other countries. It is mathematically certain, in other words, that the practice among the nations of dumping their so-called surplus on each other cannot decrease by a single dollar the total world deficiency of consumer purchasing power. This would not be the case, it is true, if such dumping carried with it an increase *on the consumer side* of the volume of money in circulation; but foreign loans, even when they do occasion an increase in the volume of money in circulation, are not made to consumers to enable them to buy finished products, but to producers and distributors to enable them to carry on business at a profit. And such business, as we have seen, makes matters worse, since it fails to yield consumers enough money to buy its product.

Thus an analysis of the production-consumption equation of the world throws light upon protective tariffs. Whatever else they may be incidentally and temporarily, they are clumsy devices, by means of which each nation tries in vain to overcome the blighting effect upon its home markets of underconsumption. The combined efforts of all the nations of the world to hinder foreign

trade do not, by one single yard of cloth, increase the buying power of the consumers of the world. By juggling tariff schedules, one nation may, indeed, gain a temporary advantage over another nation in its struggle to prevent overproduction within its own borders. Thus it may, in effect, export some of its unemployment.

But its own trade barriers prompt other countries to erect higher barriers; and this kind of rivalry, accompanied as it always has been by a similar vicious spiral of competition in armaments, is the basic cause of war. As a matter of fact, the World War, which destroyed more real wealth in one year than any nation ever gained in its entire history by means of tariff walls, sprang chiefly from the futile efforts of the most highly developed industrial nations to find outside their own borders a market for their so-called surplus goods, when the maintenance of adequate individual incomes at home might have taken care of the 'surplus' and put foreign trade on a sound and profitable basis for all.[2]

Again, let us emphasize the fact that we are speaking of a surplus of goods *in general* beyond the buying power of consumers *in general*. This is quite different from the 'surplus' which a country may have of a given commodity — wheat in Canada, or wool in Australia, for example — in the sense that the people of that country would rather have other goods from abroad in exchange for that 'surplus' than consume the 'surplus.'

Equitable Distribution of Income cannot solve the Problem

The fundamental cause of underconsumption, according to theories that are ardently supported by millions of people, is a maldistribution of income that gives the wealthy few more than they can possibly spend, even in wanton extravagance, and the impoverished multitudes

not enough to keep them decently fed and clothed and housed. There is, indeed, much to be said — much that we should say here, if it were not beside the point — in

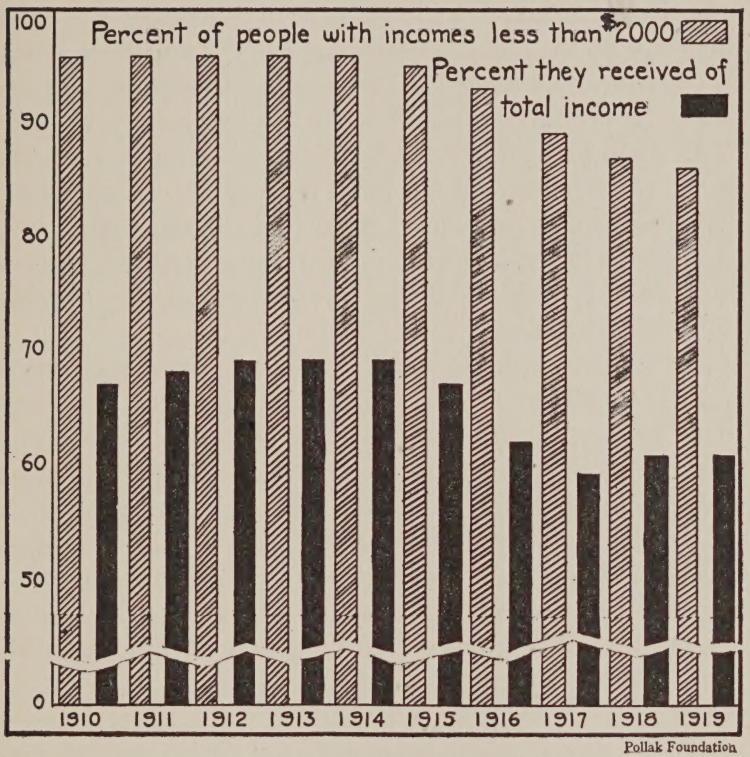


FIGURE 46. PROPORTION OF PERSONS RECEIVING INCOMES BELOW TWO THOUSAND DOLLARS, AND PROPORTIONS OF TOTAL NATIONAL INCOME RECEIVED BY THESE PERSONS

favor of a more equitable distribution of the national income.[3]

There is, however, no possibility of distributing income in such a way that it will buy the output of industry at current prices when the *total* income is inadequate for

the purpose. Yet there are high authorities who believe that a more equitable distribution of income would solve the economic problem. J. A. Hobson, for example, in *The Economics of Unemployment*, ascribes the shortage of effective demand 'not to any lack of monetary power to purchase all the commodities that could be produced, but to the refusal of those in possession of this power of purchase to apply enough of it in buying consumables.'[4] 'There can be no real remedy,' he says, 'except a removal of the surplus elements in large incomes.'[5] In our view, however, this treatment cannot remedy the malady; it can merely check its development; for a 'maldistribution of income' is only one of the conditions, not the primary cause of the malady.

Mr. Hobson endeavors to demonstrate these two propositions: '(1) That the proper provision against trade depressions and unemployment lies in strengthening the consuming powers of the community, so that effective demand for consumable goods may keep full pace with every increased productivity that arises from improvements in the arts of industry; and (2) that the strengthening of consumption is obtained by a better distribution of the product of industry.' With the first of these propositions we fully agree. We see no possibility, however, of adequately strengthening consumer demand by a more equitable distribution of income; we see no way of distributing income, as industry is now financed, so that it will steadily stimulate production and 'maintain it continuously at its highest level.'[6]

Nevertheless, though no change in distribution of income can offset deficiencies in consumer demand caused by 'over-saving,' a wider distribution of ownership of securities, by changing the channels of the flow of interest and of dividends, helps to steady the flow of money into

consumers' markets. Thus it reduces fluctuations in the discrepancy between supply and demand. The reasons, Mr. Hobson has clearly set forth. The larger the proportion of consumers who receive income from property, the larger the proportion of that income which is spent promptly for consumers' goods. If, for example, there were only five million stockholders, a larger part of the dividends would be saved, and a smaller proportion spent, than would be the case if there were ten million owners. Consequently, the notable progress of recent years toward popular ownership of the instruments of production has reduced the proportion of profits which is used twice in succession to fill retail shelves with goods, and increased the proportion which is used promptly to clear the shelves. Thus the accumulation of excess supplies has been retarded. In short, the wider the distribution among consumers of the money which corporations have received from consumers and disbursed as dividends and interest, the longer delayed is the deficiency in consumer buying which brings every forward movement of business to an end. But even if society attained the universal distribution which should be its goal, even if every member of society were a capitalist, this would not offset deficiencies of consumer income which had already been caused by the use of individual and corporate savings to increase production.

A different apportionment of the national income, therefore, is neither essential for the attainment of the economic aim of society nor a guarantee that it will be attained. It is possible to have a higher standard of living without a more equitable distribution of income, or a more equitable distribution without a higher standard of living. Even if the present national output were divided equally among the population, and even if such a

leveling did not curtail the output, the per capita gains of the wage-earners would be small. They would be far too small to solve the economic problem. Society must find the means of inducing a constantly increasing volume of production, a volume increasing at a faster rate than population, at a much faster rate than a mere leveling of inequalities of the present national income would induce.

Use of Savings in Hard Times does not offset the Deficiency

Still, it is said, consumers draw heavily upon their bank deposits in times of depression and unemployment, in an attempt to maintain their standard of living. Thus, it is argued, they help to offset deficiencies in consumer buying. The evidence, however, is largely to the contrary. In 1920 and 1921, for example, when wages and total personal incomes fell off sharply, consumers as a whole, far from drawing upon their bank accounts to maintain their consumption, actually added to these accounts. In this time of extreme business depression, they increased their per-capita savings bank accounts from $118 in 1919 to $137 in 1920, and to $157 in 1921. At the same time, they increased their per-capita deposits in all banks from $271 to $327. (See Table 24, Appendix.) As these additions were far in excess of accrued interest, it is evident that they were made mainly out of current income from other sources.

During the highly prosperous years 1914–18, on the contrary, when the rapidly rising price-level showed that demand was outrunning production, and that savings would help to curb that disastrous movement, the increase in per-capita savings bank deposits was only $22, and in total individual deposits only $43. Thus in the *two years of deflation*, when the *spending* of income would have helped the situation, net increases in savings were

nearly twice as large as in the *four years of inflation*, when the *saving* of income would, temporarily, have helped the situation.

Further evidence that savings bank deposits do not help to sustain demand when such help is most needed,

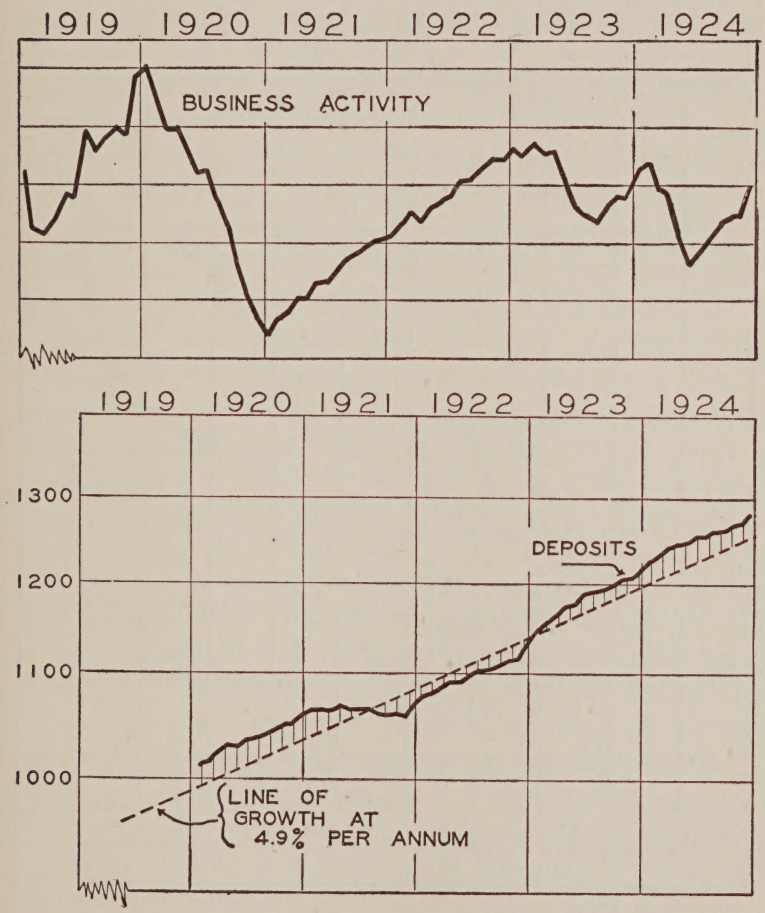


FIGURE 47. SAVINGS DEPOSITS (IN MILLIONS) IN 64 NEW ENGLAND MUTUAL SAVINGS BANKS COMPARED WITH BUSINESS ACTIVITY
(See *Monthly Review* of the Federal Reserve Bank of Boston, January, 1925)

may be found by contrasting the index of business activity in New England with the growth of deposits. This may be done by observing the relative courses taken by the two lines in Figure 47. Contrasted with the sharp decline in business activity which lasted throughout the year 1920, is the steady growth throughout that year, at almost exactly the usual rate, in the volume of savings

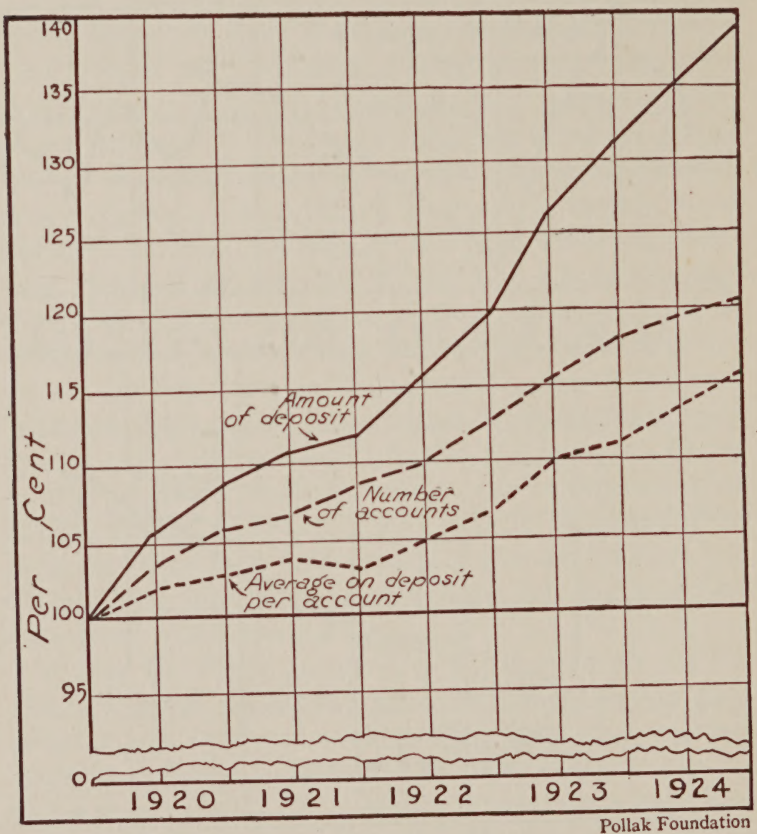


FIGURE 48. SAVINGS DEPOSITS, NUMBER OF ACCOUNTS, AND AVERAGE AMOUNT ON DEPOSIT IN NEW ENGLAND BANKS
(Data from Federal Reserve Bank of Boston covering all reporting banks)

bank deposits. During that year of collapse, and in fact throughout the depression of 1921, as Figure 48 shows, total deposits and number of accounts continued to increase as steadily as though New England were doing 'business as usual.' It appears, then, that during the most disastrous depression of recent times, New England consumers did not offset their wage reductions by drawing upon their savings accounts.

The least we can say, therefore, is that whatever else may help to sustain demand when unsold goods begin to pile up, not much help can be expected from the use of individual savings. In the long run, moreover, the spending of savings can only affect the deficiencies in consumer demand caused by the savings themselves. So our original assumption, that wage-earners as a whole spend in each year all and no more than they receive, does not invalidate the conclusions of any of our Cases.

Speculation does not offset the Deficiency

Up to this point we have taken no account of sales of real estate, stocks, and bonds. We have left them out because such transfers between individuals do not affect the volume of goods in consumers' markets, or necessarily affect the volume of money in consumers' hands. For it is plain that any transaction, the net outcome of which is a transfer of non-consumable goods and of money from one consumer to another, does not change either supply or potential demand — does not necessarily affect the annual equation. Such a transaction may, indeed, immediately increase consumer demand by passing money from some one who would not spend it to somebody who does spend it; and the transaction may occasion an expansion of bank credit. The net effect of all such sales on consumer demand at each stage of the mar-

ket is one of the many subjects that calls for statistical research.

A bull market increases the volume of money in circulation and a part of the increase goes to consumers. For speculation, by putting up stock prices, makes borrowers eager to increase their loans, and at the same time makes their securities the acceptable basis for larger loans. A part of this borrowed money goes as wages and commissions to the large numbers of consumers who are engaged, directly or indirectly, in buying and selling securities. Another part swells the profits of speculators and is spent by them. Thus, in the upward swing, speculation expands the volume of bank credit and increases consumer demand when an increase is least desirable.

When, however, the bull movement ends, and bonds and stocks at falling prices are no longer regarded as adequate security for outstanding loans, the banks exert pressure which results in reducing the volume of money in circulation and the flow of money to consumers, precisely when sustained consumer demand is most needed. Still, decade after decade, there have been substantial increases in the total volume of loans on securities, and these increases may have made consumer demand more nearly adequate than otherwise it would have been.

Thus, although speculation in the stock markets may increase consumer demand when it is already excessive, and may decrease consumer demand when it is already deficient, it is not clear from the available statistics to what extent speculation either creates permanent deficiencies in consumer demand or offsets deficiencies that are caused by other branches of business.

Various Time-Lags do not offset the Deficiency

There now remains to be considered one and only one

of the eight assumptions under which we started out to examine the accounts of our imaginary Corporation. (See page 268.) In our Cases, we assumed that goods were sold in the unit of time following that in which they were produced; and we called the unit of time one year. Our conclusions, however, would follow from any other assumptions regarding time. The longer it takes for goods to go through the various processes of manufacture and distribution, the longer a period of overproduction may continue before producers become aware that they are overshooting the market. The overshooting, however, is precisely what it would have been if the same output had been financed in the same way in half the time. That is to say, the discrepancy between the value at current retail prices of a given bill of merchandise and the money distributed to consumers in connection with making and marketing the merchandise is precisely the same, whether the process takes a day or a decade. In short, the lag between production and sale to consumers affects the *time* when deficiency of purchasing power becomes manifest, but it does not affect the *size* of the deficiency.

Likewise, all our conclusions hold even after full allowance has been made for the lag of wages behind prices in a period of expansion, and even if we assume that the lag is somehow overcome. Those who maintain that the deficiency in consumer purchasing power would be prevented if, in a period of enlarged production, gross wages went up as rapidly as retail prices, take no account of the actual origin of the deficiency.

It is true that if gross wages went up as rapidly as retail prices, profits would be smaller. Smaller, in consequence, would be the incentives to enlarge plant and product, as well as the funds available for the purpose. As a result, overproduction would not develop at so

rapid a pace and business fluctuations would be less extreme. But even if gross wages actually rose at exactly the same rate as the price-level of consumers' goods, *gross real wages* would be stationary. Consequently wage-earners would still lack enough money to buy the *increased* output.

One by one, we have set aside our eight original assumptions without thereby discovering any means of permanently making up the shortage of consumer demand. Thus we come finally to the conclusion that the cause which certainly operated in our hypothetical case to pile up unsold goods and bring an end to increased production is chief among the causes which bring the same results in the real world.

Demand must equal Actual, not Potential, Output

The chief economic need, therefore, is a flow of money to consumers sufficient to provide for the necessary growth in their savings, and yet enable them to buy and to continue to buy, at an approximately stable price-level, all the goods that are *actually* ready for final consumption. To some of those, however, who believe with us that inadequate consumer income is the chief obstacle to economic progress, such a flow of money as we call for seems insufficient. C. H. Douglas, for example, appears to contend that the flow must far, far exceed the requirements for absorbing *actual* output. Mr. Douglas insists that the consumer must 'always have the financial means to exercise full call on both the actualities and the potentialities of production.' [7] Mr. Abbati agrees. 'Effective demand,' he says, must be 'at all times equal to the full productive powers of the country.' [8]

Such a vast increase in consumer income, however,

would not achieve the desired end, for the immediate result would be inflation. Assume, for example, that the potentialities of production are twice the actualities, and that the income of the people is at once sufficiently increased to enable them to buy the potentialities at the prevailing price-level. Such additions to income, which it is said would call forth capacity production, would in reality nearly exhaust themselves in approximately doubling prices,[9] and society would suffer the evils — economic, social, and moral — of a period of inflation, even if any way could be found of preventing inflation from culminating, as it usually does, in the greater evil of deflation.[10] Indeed, under the present system, as we have shown, it is the very fact that, in a period of industrial expansion, consumers receive more than enough money to buy the actualities of production which lifts prices, gives the business world unwarranted confidence in the sustained demand of consumers at the higher level and thus leads to underconsumption and its unhappy sequel.

Furthermore, the plan is impracticable. There is no possibility of giving the public exactly enough money to buy the *potentialities* of production, since nobody knows what they are. It is perfectly feasible, on the other hand, to determine what the flow of money must be in order to bring about the sale of the *actual* output of industry. The computation can be made roughly, even from our present unsatisfactory indexes of consumer income, production of consumers' goods, and cost of living; and it could be made within a narrow range of error and could be corrected promptly enough, if the more accurate indexes were available which even now would be in daily use, if those in authority had been fully aware of their great utility. Fortunately, steady and rapid progress toward potential production can be made without inflation. All

the industrial world needs is assurance that consumers will receive enough money to buy the actual output of goods, at a fairly stable price-level, as fast as they are ready for consumption; that is to say, assurance that general overproduction is no longer possible.

Does This Theory exaggerate the Importance of Consumer Demand?

Still there are those who are not convinced. Is it logical, they ask, to ascribe the collapse of the forward movement to a failure of consumer demand when the slump comes first in dealer demand? Retail trade is, in

FIGURE 49. FLUCTUATIONS IN THE DOLLAR-VALUES OF WHOLESALE TRADE AND RETAIL TRADE, 1920–22

(Data from Willford I. King, 'Trade Cycles and Factory Production,' in *The Problem of Business Forecasting*, Pollak Publication, Number 6)

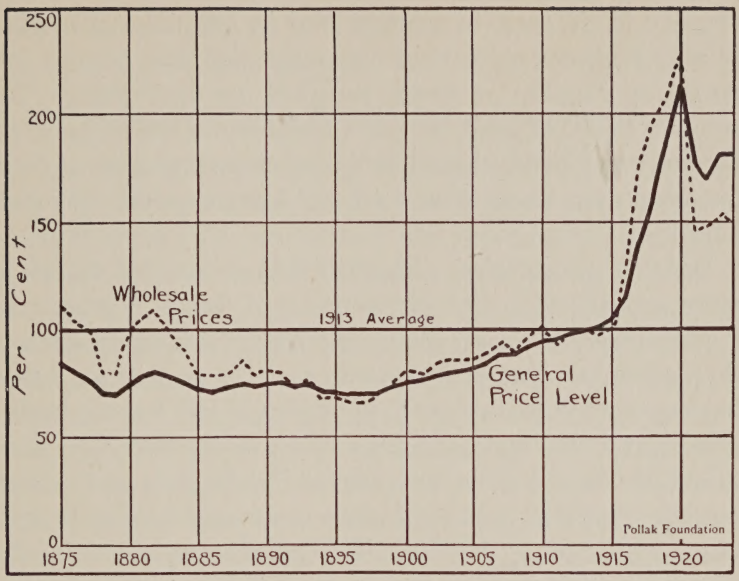


FIGURE 50. GENERAL PRICE-LEVEL COMPARED WITH WHOLESALE PRICE-LEVEL, 1875–1924

———— General Price-Level

- - - - - - Wholesale Price-Level

(General price-level from the Federal Reserve Bank of New York; wholesale price-level from the United States Bureau of Labor Statistics)

fact, fairly well sustained for some time after wholesale trade is in the doldrums. All along the line from the retailer back to the producer of raw materials, the farther we get from the consumer the greater are the fluctuations; total volume of trade never does contract as much as wholesale trade. (See Figures 49 and 50.)

These facts, however, are consistent with our position, as the following analysis shows:

Sometime before consumer demand fails to match the supplies that are actually reaching retail markets, it becomes clear that the sustaining of demand on the *existing* level will not be sufficient to absorb the supplies that are

already in process, in transit, and in speculative hands. It also becomes clear that consumer demand cannot *increase* as rapidly as these supplies are increasing. To achieve that purpose, as our Cases show, the volume of money must be increased at an accelerating rate, and all business men know that such an increase does not last long.[1]

Because production always increases on the upswing more rapidly than the distribution of finished products, stocks accumulate all along the way to such an extent that producers can reduce their scale of operations, stop buying materials, cause a precipitous fall in wholesale prices, and still continue for some time to supply a sustained demand in retail markets. Production and dealer buying are thus curtailed before consumer buying is curtailed, not merely because it is evident that goods are piling up all along the line beyond the capacity of consumers to buy them at current prices, but because business men know from experience that this is exactly what happens in every period of increased productivity.

In the actual sequence of events, each is in part the cause of those that follow:

As the volume of production increases, industry fails to distribute to consumers enough money to buy the total output.

Stocks accumulate in all stages of production.

Unit sales to consumers cannot keep the pace, without a fall in prices, even if there is no falling off in dollar sales; indeed, even if there is an actual increase in dollar sales.

Production declines.

Wages decline.

Dollar sales decline.

Production declines still further.

Wages decline still further.

And so on, down the vicious spiral of deflation.

Since this is the sequence of events, the fact that the slump in wholesale markets precedes the slump in retail markets does not prove that the trouble originates in wholesale markets. Our analysis shows, on the contrary, that dealer buying and production are curtailed because of the well-grounded fear that consumers' income will not continue to increase fast enough to absorb the increased volume of goods which is already on its way to consumers' markets. We do not mean to imply that every one from the cotton planter to the shopkeeper takes his warning directly from consumers. Usually those who are closest to consumers pass on the evidence of approaching trouble to those who are one stage farther away, and so on down the line, until the fear of inadequate consumer demand is thus relayed to every stage of business. So even if the dealer in raw wool stops buying solely because he cannot sell to woolen mills, he nevertheless stops buying, whether he knows it or not, because consumer demand has not kept pace with production. It is not always the final distributor, however, who first senses trouble; often the dealer in raw materials sees the coming slump in retail trade before it is seen by those who are closest to consumers.

If producers had reason to expect that consumer demand would keep the pace, and if they were thus protected against violent changes in the price-level, they would have no motive for curtailing production. On the contrary, they would have the strongest motive for increasing production, for their profits would depend mainly on increased production.

'Better and more widely diffused knowledge,' says Alfred Marshall, 'is a remedy for that excessive confidence which causes a violent expansion of credit and rise of prices; and it is also a remedy for that excessive distrust that follows.'[12] And, we may add, sufficient for that purpose would be the knowledge that the flow of money to consumers would make a market at current prices for all that could be produced.

The fact that the peak in profits comes some time before the break in prices (see Figure 23) is also consistent with our theory. For in so far as profits consist of increased inventories which are not forced upon the market, these profits do not cause a slump in prices. Furthermore, even after profits are realized in money, more time must elapse before the increased output which results from the use of this money is ready for the markets. During this time the lag of wages behind prices is reduced. During this time, also, many business men operate on a less profitable basis, without being aware of the fact. Consequently, business activity and the flow of finished goods continues to increase after profits have begun to decline. So the fact that overproduction does not culminate in a recession of business until some time after profits have reached a maximum, far from being inconsistent with our theory, is exactly what we should expect.

Demand for Producers' Goods is Secondary

Even so, there are many who believe that we overestimate the importance of consumer demand. They contend that a surplus of producers' goods discourages business as much as a surplus of consumers' goods. 'Does not the whole argument apply just as forcibly to demand for producers' goods?' asks one critic. 'If, for

example, manufacturers stop buying raw materials or partly finished goods on account of lack of confidence in the future, will there not be a business depression even if consumers continue to buy as usual?' The production of lathes that cannot be sold, it is said, is as serious a matter as the production of chairs that cannot be sold; and there is, therefore, as much reason for focusing attention upon the means of sustaining primary demand as upon the means of sustaining secondary demand.

This objection has been raised frequently; yet the answer seems not far to seek. Adequate secondary (consumer) demand is, in itself, enough to sustain adequate primary (producer) demand; but primary demand, as increased production is financed in a profit-seeking world, does not put into circulation enough money to sustain adequate secondary demand. In other words, there cannot be a surplus of producers' goods in general (although a surplus in any one line is always possible) as long as consumer demand keeps up with the output of finished goods in general; but there can be a surplus of consumers' goods in general, even if producers' demand keeps up with the output of producers' goods. The root of this distinction is the necessity for profits. Since all the profits, all the way up to the retailer, are accumulated in the final sales price, nothing but adequate consumer demand can provide industry at all stages with the means of continuing operations. Thus it is that the using up of consumers' goods sufficiently stimulates the demand for producers' goods, but the reverse is not true.

Here is a distinction, commonly overlooked, that cuts to the heart of the economic problem. The spending of money for new capital facilities and raw materials as a rule increases the supply of finished products in due time but, as we have seen, it does not proportionately increase

consumer demand; the spending of money for finished products, on the other hand, proportionately increases the demand for new capital facilities and raw materials. *Consumers never stop buying because they fear a slump in the market for producers' goods; producers periodically stop buying because they fear a slump in the market for consumers' goods.*

As this distinction is essential for an understanding of our entire analysis, we venture to state again the reason why the sustaining of consumer demand is our central interest: The processes whereby capital investments are made do not in themselves normally bring forth increased consumer demand in proportion to the increased production that results from the enlarged capital facilities; but the processes whereby consumers' expenditures are made, do in themselves normally bring forth increased production in proportion to increased consumer demand. This is the rule. It is universal and permanent; exceptions are sporadic and temporary. All of which follows naturally from the fact that the using up of consumers' goods is the end of economic activity, while the using up of producers' goods is only one means toward that end.

So far our argument has been largely speculative. It remains for us to inquire to what extent the available statistics are consistent with our conclusions. Before we take up this inquiry, however, we may here enumerate, by way of summary, the main phases in a period of business expansion, the central feature of which, according to our theory, is an excess which leads inevitably to a deficiency in the flow of money to consumers. This outline is not offered as evidence in support of our theory, but merely as a description of what takes place. The reader will note, however, that what takes place is entirely con-

sistent with our theory; and he may be prompted to pursue the inquiry as to whether all this is consistent with any other theory.

Sequence of Events that lead to Business Depression

In a period of depression, prices, profits, wages, and the cost of doing business are low, and bank reserves are high.

At such a time, however, consumer purchasing power which is derived from fixed incomes is larger than at other times; that is to say, consumers can buy more goods with their receipts from salaries, interest, dividends, and annuities, than they could buy before the break in prices. At the same time, all branches of the Government buy and consume about as much as usual. Moreover, because costs are low, building operations, and therefore wage-payments, presently increase, and since consumers do not at once pay, directly or indirectly, for most of the new buildings, the net result is an addition to consumer demand. These are some of the reasons why stocks are reduced and industry begins to revive.

Since dealers have been ordering only to cover day-to-day needs, and since there are sources of increased consumer demand, and since some dealers believe that prices have reached bottom, orders are increased. Consequently, manufacturers increase their output and later their fixed capital. There is growth in bank loans, in employment, and in wages.

At first, when industrial equipment and the volume of production, and consequently total wage payments, are increasing, wages reach consumers' markets as increased effective demand in advance of the increased supply of commodities.[13]

This stimulates a rise in prices.

The rise in prices accelerates the buying movement.

Wages continue to rise faster than finished goods are produced.

Prices rise faster than wages.

Bank loans are further increased.

For a while, partly because wages are paid in advance, partly because commodities accumulate in intermediate stages of production, partly because of speculative withholding of commodities,[14] enough money flows into consumers' hands to buy, at the higher price-level, enough commodities to sustain the orders of retail merchants.

Presently, however, profits rise faster than wages, and profits are not distributed to stockholders until after the commodities are sold upon which the profits are realized; and even then are only about half distributed.[15]

The time comes when the markets feel the effects of the increased supply of commodities, but when the volume of purchasing power that comes mainly from expanded bank loans, and reaches consumers mainly as increased dividends and increased wages, does not increase at a rate sufficient to keep pace with the increased supply.

Meanwhile the eagerness to expand operations has been curbed because the prices at which it is possible to sell goods have not increased so rapidly as the costs of doing business. Wages, salaries rent, and interest, which lagged behind profits and commodity prices, have begun to catch up.

When, for any reason, it appears that buying will not continue to increase, speculators unload stocks, dealers diminish orders, and producers curtail production.

Those who have commodities to sell and have doubts concerning the future demand are likely to force their stocks on the market.

Prices stop rising.

As soon as prices stop rising, they are apt to begin to fall, since much of the business that has sprung up during the rise in prices depends for its existence upon continued strength in prices.

Once prices begin to fall, many influences operate together to continue the movement, and a period of business depression ensues.

It makes no difference, as far as our theory is concerned, where we break into this cyclical movement to begin enumerating the sequence of events. Wherever we begin, we find conditions which necessitate the movement of business upward or downward. Moreover, our theory applies as well to depressions which appear to be caused mainly by the overproduction of services, as to depressions which appear to be caused mainly by the overproduction of commodities.

According to our theory, the most important factor in this entire cyclical movement, without which all other factors could neither cause a severe business depression nor lift business out of a depression, is a changing volume of money flowing through various channels in such a way that the flow of money to consumers, which at first exceeds the flow of finished goods, presently fails even to keep pace with the flow of goods. Thus deficient consumer purchasing power prevents the substantial, sustained progress toward attaining the economic aim of society which adequate consumer demand would bring about.

CHAPTER XXX

STATISTICS AND THE ANNUAL EQUATION

If the analysis which we have presented of our money and profit economy is sound, inadequate consumer income prevents society from achieving the higher standards of living which natural resources, existing capital equipment, improvement in the arts, the willingness of workers to work, and the urge of the profit motive would otherwise enable society to attain. We come, finally, to the question whether that conclusion is supported by statistics of production and distribution.

Naturally, the available statistics are insufficient for our purpose, since in the past this specific problem appears to have been overlooked, and since it is not yet definitely studied by those agencies, public and private, which are equipped for such an extensive quantitative inquiry. Indeed, it is only within the past decade that reliable indexes have been constructed of such supremely important matters as national income, volume of production, volume of trade, and turnover of bank deposits. As yet, neither the flow of consumers' income nor the flow of consumers' goods has been measured with any approach to the accuracy with which we now measure many far less important economic factors. Furthermore, the available statistics, such as they are, having been collected for other purposes, are at best not exactly what is needed. Without much further statistical study, therefore, it is impossible for any one to answer the question: What, after all, can we do about it? A convincing solution of the problem of adequate consumer demand must await the results of further research.

The two questions immediately before us are: (1) Is it a fact that much progress has been made during the past generation toward higher standards of living for the people generally? (2) If not, is there any statistical basis for the contention that the chief cause of this failure is the failure of consumer demand to keep pace with output?

Statistics of Real Wages do not reveal Notable Progress

To the first of these questions the most comprehensive available answer is the buying power of wages; and the latest statistics in this field are found in the study of *Real Wages*, by Paul H. Douglas (Pollak Publication, Number 9).[1] This study shows the purchasing power of wages in sixteen manufacturing industries and in anthracite and bituminous coal mining. It appears that the average wage-earner in these industries could not exchange a week's labor for very much more real wealth in the past decade than he could in the decade from 1890 to 1899.

Our central interest, however, is not in hourly wages or in weekly wages, but in the Nation's total annual pay-roll; and the available statistics are not an accurate measure of this total because not all wage-earners work the standard number of hours. Some work part-time; some over-time; and some are employed for only a part of the year. There is no satisfactory index of the actual yearly earnings of all workers.

A comparison of growth in population with growth in production provides a different approach to the same question. If population has increased for several decades at the annual rate of about 2 per cent, and if meanwhile production has increased at the rate of about 3.7 per cent,[2] and if 2 per cent or even 1 per cent of the total annual output has been used to add to our inventories and

our unused capital facilities, and to provide the means for increasing the average length of haul to markets, it is evident that substantial gains in standards of living have been impossible. Indeed, even if there were no increases in unused capital facilities, and even if there were no increases in other wastes that result from ineffective distribution to consumers, nevertheless higher standards of living at home could be rendered impossible by exports of goods to people who do not pay in goods. And this, we are told, is the only way to dispose of our 'surplus' production.[3]

It may seem impossible to reconcile such statistics with sales of automobiles, radio-sets, and the latest fad in clothes. From casual observations of such purchases by wage-earners, many people have gained the impression that the real income of wages is much larger than it was a generation ago. Such impressions, however, based as they are on a few details, and gained necessarily from a very few among millions of wage-earners, are of little value compared with comprehensive statistics.

In any event, it does not matter, as far as our theory is concerned, what estimate of gains in real wages is nearest the truth. Not only the painstaking and extensive researches which Mr. Douglas and his statistical assistants have just completed, but also the studies which show greater gains in real wages, warrant at least this conclusion: Wage-earners have not been able to purchase very much more with their wages during the past decade than they could purchase in the nineties. Since 1890, the people have made little progress toward higher standards of living, compared with the progress they might have made, had consumer demand been sustained at a sufficiently high level to call forth the potential output of industry.

Income Statistics show the Inadequacy of Consumer Demand

Our next question is whether the facts, as far as they are known, seem consistent with the conclusion that the chief cause of the failure of society to make steady, substantial progress toward its aim is failure of consumer income. A final answer to that question is not yet possible, since, as we have said, the available statistics provide nothing but rough measures of the deficiency in consumer purchasing power. They are not yet satisfactory either for the output of consumers' goods, or for the flow of money that constitutes the demand for these goods. Nevertheless, the available statistics are far superior to those of even a decade ago. Although they do not provide strictly comparable measures of output and demand, they do show, first from one point of view and then from another, that every marked recession in business follows a period during which goods are piled up beyond the capacity of willing buyers to take them from the markets.

This deficiency of purchasing power appears in broad outlines in the reports on net income issued by the United States Treasury Department. These reports show that the total net income of income tax-payers rose from less than 13 billion in 1917 to nearly 20 billion in 1919. The next year, 1920, the *increase* was nearly 4 billion; but the following year, 1921, the *decrease* was nearly 4 billion. Thus, in a year of severe industrial depression, a year when business needed above all else the driving force of sustained consumer demand, the possibility of demand from the current income of income tax-payers was reduced about 4 billion dollars. This was a reduction of about 17 per cent.

Other statistics show that income from wages and salaries in 1921 also fell at least 17 per cent, a reduction,

according to the best authorities, of more than 7 billion dollars.[4] Total payments for wages and salaries, as Figure 51 shows, dropped from 10,472 million dollars in the third quarter of 1920, the peak of the boom, to 7,743

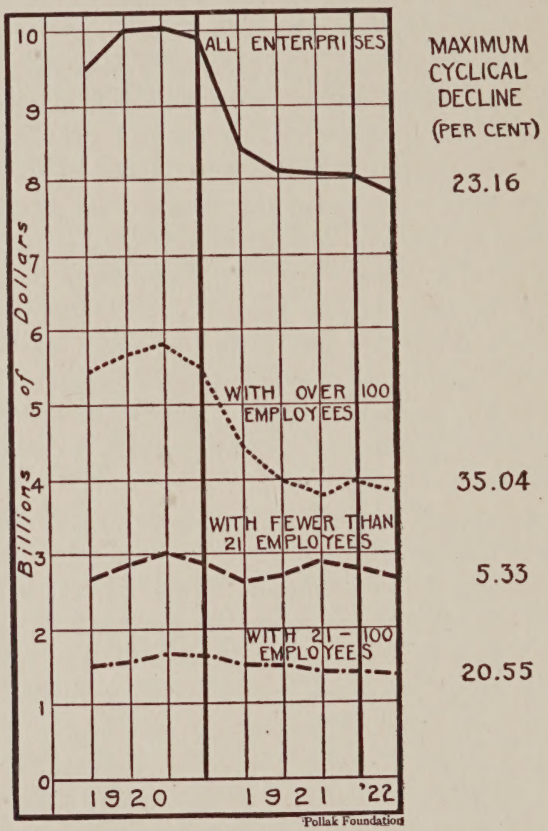


FIGURE 51. DECLINE IN WAGES DURING THE DEPRESSION OF 1921

million dollars in the first quarter of 1922, the trough of the depression, a cyclical decline of 23 per cent.[5] This reduction was caused mainly by large concerns. Although

during the year 1920 they employed only about half the workers of the country, they were responsible, in the depression of 1921, for more than three fourths of the layoffs.[6] The average reduction in wages made in 1921 by concerns that employed fewer than twenty workers was $44; but concerns that employed more than one hundred workers made an average reduction of $432. Among the smaller concerns, the decline in total hours of employment from the peak was 3 per cent; among the larger concerns the decline was 28 per cent. Figure 52 shows the

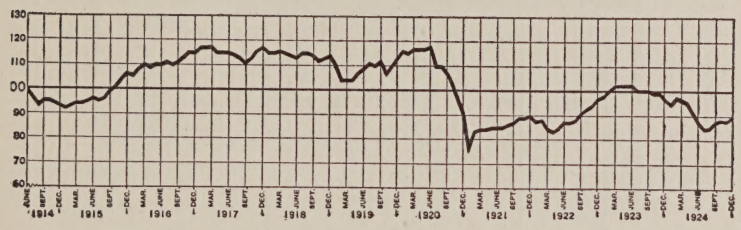


FIGURE 52. INDEX OF EMPLOYMENT, 1914–24
Average monthly employment in 1923 = 100
(From *Survey of Current Business*, United States Department of Commerce, December, 1924)

total decline in employment for the entire country, and Figure 53 shows the close correlation between a decline in factory employment and a decline in the volume of trade.[7]

From these statistics, it is true, we cannot tell whether the reduced income caused the depression or the depression caused the reduced income. We can say with certainty, however, that whatever may have initiated the depression of 1921, nothing more was needed to continue it than the decline of about 10 billion dollars in individual income. Indeed, if consumers had not been deprived of these billions, all the other causes put together could not have sustained a general business depression.

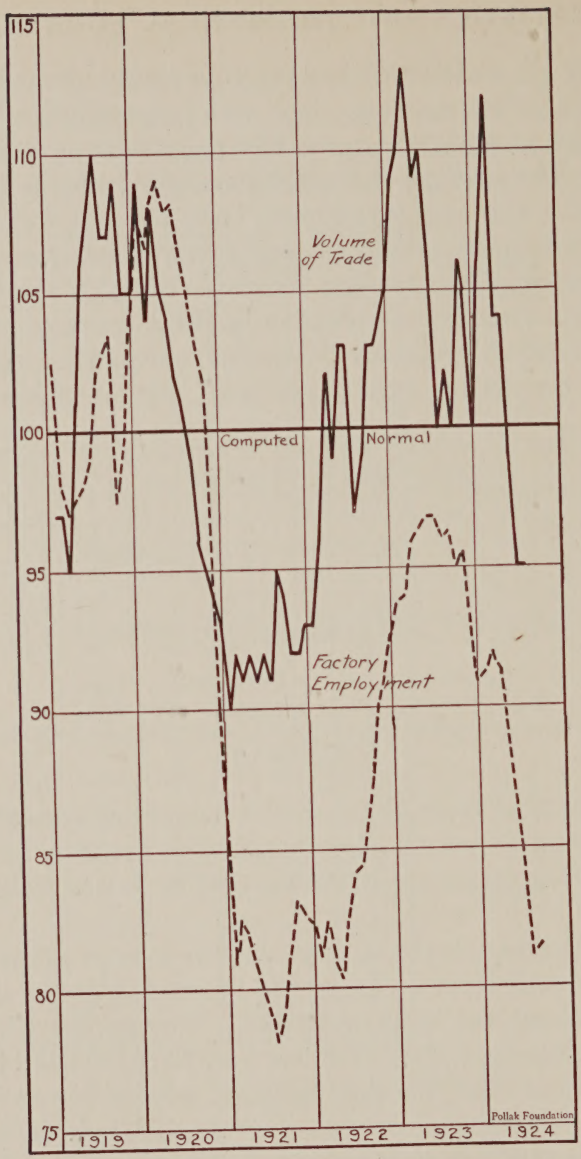


FIGURE 53. VOLUME OF TRADE COMPARED WITH VOLUME OF EMPLOYMENT
(Volume of trade index is from the Federal Reserve Bank of New York. Employment index is a monthly index of factory employment, devised by Dr. William A. Berridge)

Indexes of Production and Distribution seem to tell the Same Story

The fact that consumer demand does not keep pace with production is also revealed by various indexes of production and distribution. Of these indexes the best for our purpose are those prepared by the Federal Reserve Bank of New York.[8] Its index of the volume of trade, devised by Carl Snyder, includes twenty-eight different series, grouped and weighted as shown on page 384.

Unfortunately for our purposes, the index of productive activity in this series is not strictly comparable with the index of distribution. Nevertheless, a comparison of these indexes, as presented in Figure 54, reveals in a general way what, according to our other statistics, takes place in cycle after cycle. The chart shows that as distribution to consumers slackened in 1920, productive activity fell off much more rapidly. The chart also shows that productive activity far outran distribution to consumers during 1923 and early 1924, and that a precipitous slump in productive activity followed. From summer of 1922 to spring of 1924 productive activity in general, as well as production of consumers' goods (see Figure 55) was far above normal. Throughout this period, however, distribution to consumers averaged below normal. The marked recession in productive activity in the middle of 1924 was, therefore, exactly what, according to our theory, the business world had reason to expect.

The failure of trade to keep up with production, during the upward swing of business following the depression of 1921, is shown in the top section of Figure 55. The failure of distribution to consumers to keep up with distribution to dealers during the same period is shown in the middle section; and the failure of distribution to dealers (primary distribution) to keep up with production of consumers'

INDEX OF THE VOLUME OF TRADE

	Weight (per cent)	
Productive Activity		
1. Consumers' goods	8	
2. Producers' goods	9	
3. Factory employment	6	
4. Motor cars and trucks	2	
5. Building construction	4	29
Primary Distribution		
6. Merchandise car-loadings	5	
7. Other car-loadings	2	
8. Wholesale trade	8	
9. Exports	3	
10. Imports	2	
11. Panama Canal traffic	1	
12. Grain exports	1	22
Distribution to Consumers		
13. Department-store sales	8	
14. Chain-store sales	3	
15. Chain-grocery sales	6	
16. Mail-order sales	3	
17. New life insurance	2	
18. Amusement receipts	2	
19. Advertising	2	26
General Business Activity		
20. Outside debits	8	
21. New York City debits	5	
22. Postal receipts	1	
23. Communication	1	
24. Electrical power production	2	17
Financial Activity		
25. Shares sold on New York Stock Exchange	2	
26. New corporate financing	2	
27. Grain future sales in Chicago	1	
28. Cotton future sales in New York and New Orleans	1	6
		100

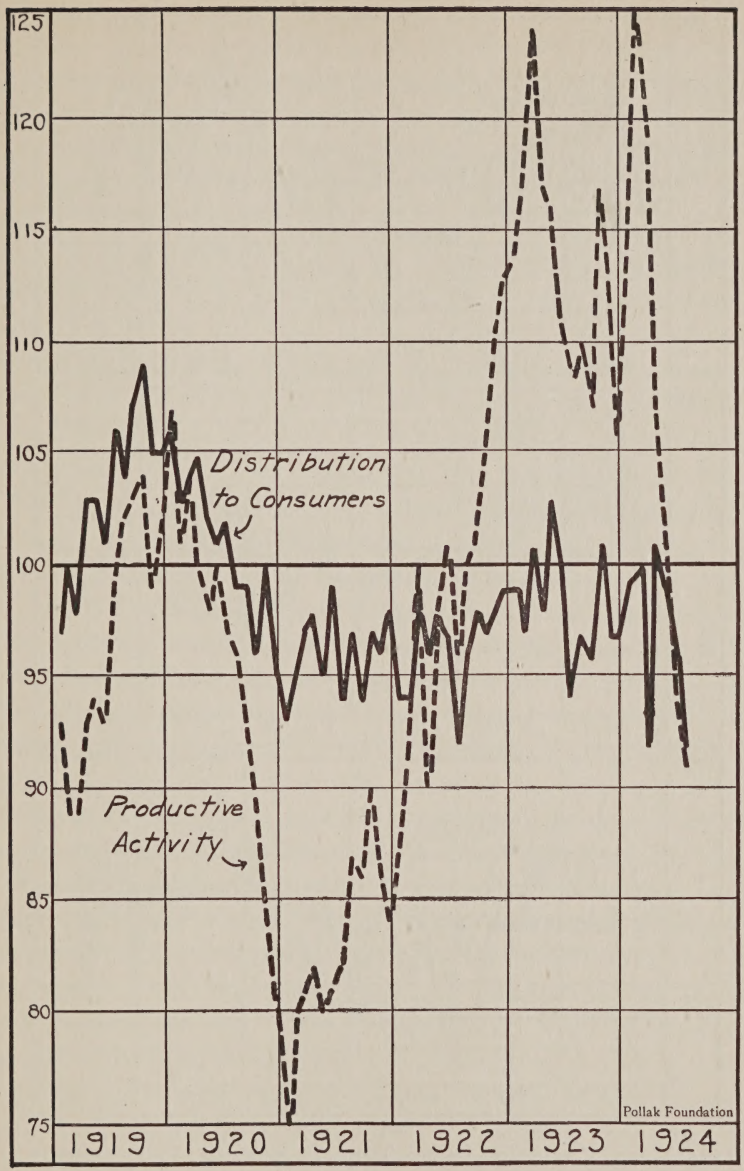
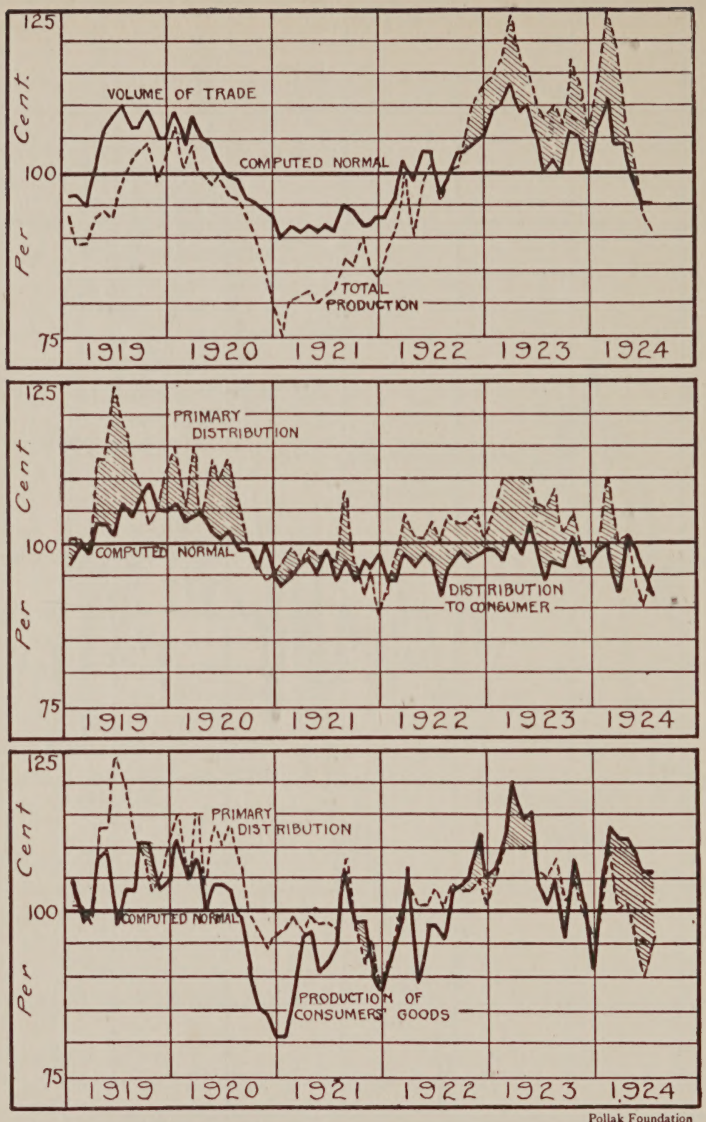


FIGURE 54. PRODUCTIVE ACTIVITY COMPARED WITH DISTRIBUTION TO CONSUMERS, 1919–24

(Data from Carl Snyder, 'A New Index of the Volume of Trade,' *Journal of the American Statistical Association*, December, 1923; p. 949; with later figures furnished by the Statistical Department of the Federal Reserve Bank of New York)



Pollak Foundation

FIGURE 55. VOLUME OF TRADE, TOTAL PRODUCTION, PRODUCTION OF CONSUMERS' GOODS; DISTRIBUTION TO CONSUMER; AND PRIMARY DISTRIBUTION, 1919–24

(Statistics from Federal Reserve Bank of New York)

goods is shown in the bottom section. Thus, the shaded areas in Figure 55 measure in a general way, though necessarily without quantitative precision, the deficiency of consumption in a period of business expansion. In other words, the shaded areas picture the lag of distribution behind production during a period in which, after a severe depression, productive industry was unquestionably beginning to make rapid progress. In the face of these statistics, therefore, and in the light of our theory, there was no occasion to seek out the far-fetched explanations which were brought forward to explain the business recessions of 1923 and 1924 and the 'reluctance of consumers to buy' in 1925. Deficiency of consumer income, caused by the very processes of financing increased production, appears to be explanation enough.

Other statistics support these conclusions. For an entire year before the slump of 1920, and again for an entire year before the slump of 1923, disbursements of wages by factories, if the New York State figures are reliable indexes, did not keep up with the growth of physical volume of manufactured goods. During the same periods, production of cotton goods, shoes, and knitted underwear far outran distribution of these commodities by wholesalers. Even in the latter part of 1919 and the first half of 1920, a period of high wages and great 'prosperity,' the volume of commodity sales by department stores decreased. At the same time the commodity sales of wholesalers far exceeded the commodity sales of department stores. After making an extensive and careful statistical study of various industries for the years 1919–24, Simon Kuznets concludes that throughout the greater part of the period of prosperity, there was a decline in the ratio of wages disbursed by industrial enterprises to the dollar volume of output.[9]

The fact that production of commodities declined rapidly in the winter of 1920–21, as unsold stocks piled up, is shown in Figure 56. This figure also pictures the accumulation of commodity stocks early in 1924, preceding the general business slump in the middle of that year.

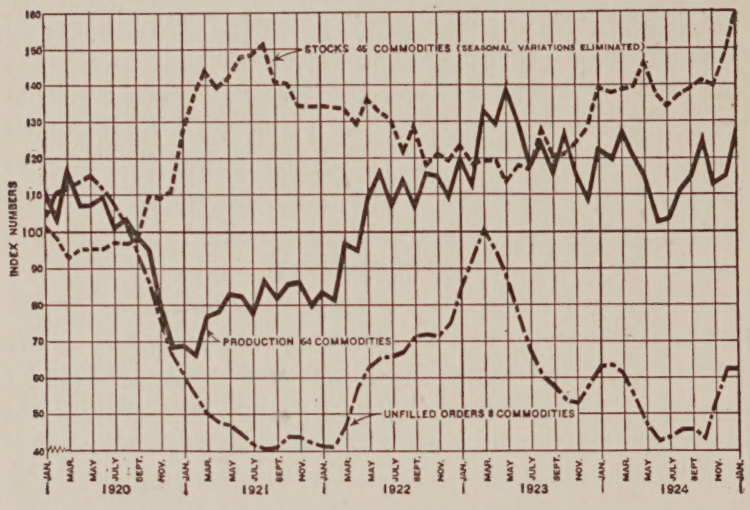


FIGURE 56. PRODUCTION, STOCKS, AND UNFILLED ORDERS, 1920–24
MONTHLY AVERAGES OF 1920 = 100
(From the *Survey of Current Business*, September 15, 1924)

The fact that production outruns distribution just before a general recession of business is also shown by our best indexes of the physical volume of trade. Figure 57 presents three of these indexes: the index of the Harvard Committee on Economic Research, the index of the American Telephone and Telegraph Company, and the index of the Federal Reserve Bank of New York. Now the index of the Federal Reserve Bank (see page 384) gives more weight than the others to distribution to con-

sumers and less weight to producers' activities.[10] According to our theory, therefore, the major recessions of this index should regularly precede more marked recessions of

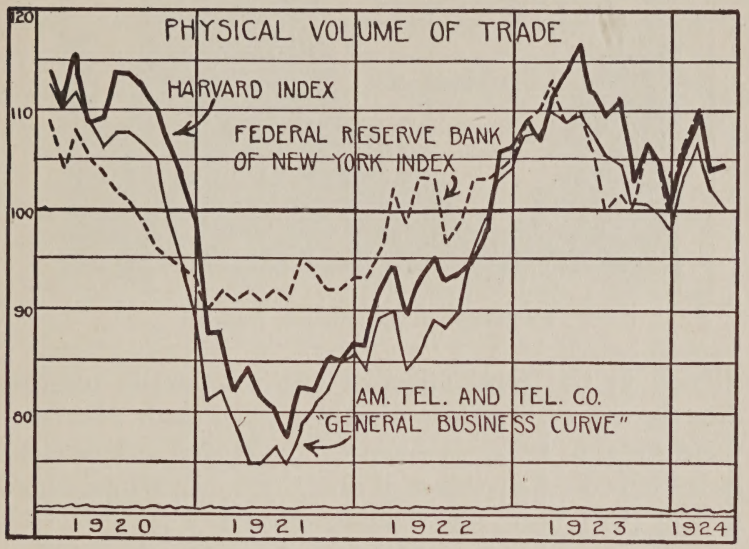


FIGURE 57. INDEXES OF THE PHYSICAL VOLUME OF TRADE, 1920–23
Index of the Harvard Committee on Economic Research
Index of the American Telephone and Telegraph Company
Index of the Federal Reserve Bank of New York

the other indexes; and a glance at the chart will show that this is what happened.

During this period, as a glance at Figure 58 will show, the falling off in basic output entailed a net loss to society which in itself appears to have been enough to prevent any substantial gain in the standard of living. Evidently the decline in basic output in the spring of 1924 — a year regarded by business men generally as a fairly good year, 'about as good as could be expected' — was nearly as precipitous as the decline in the severe depression of 1920. There is no question concerning the fact that these

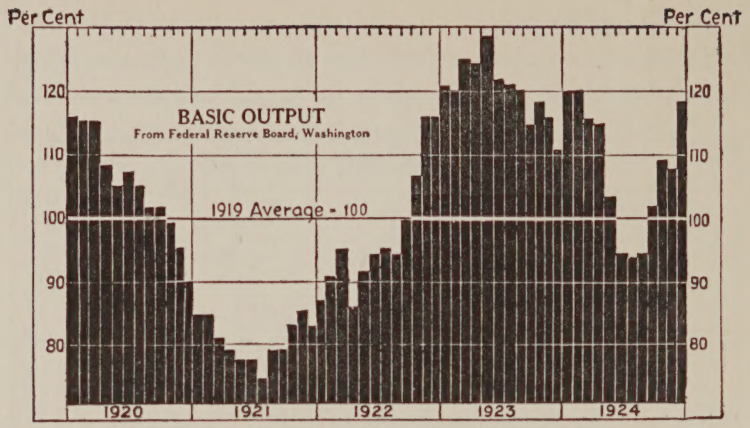


FIGURE 58. BASIC OUTPUT, 1920–24

slumps in the production of basic materials resulted directly from the failure of primary demand. Nor does there seem to be any reason to doubt that primary demand fell off only because of the failure, or well-grounded fear of the failure, of adequate secondary (that is, consumer) demand. In other words, the production of basic materials would have been sustained throughout this period at the level of 1923, though in varying proportions among the commodities, if there had been assurance of sustained demand for these materials; and this demand would have been sustained if manufacturers had believed that consumers would have enough money to continue to buy the finished products. For no one doubts that the people wanted to consume, in one form or another, at least 20 per cent more of these basic materials, taken as a whole, than the country produced during these five years; and no one doubts that the people would have bought virtually all the goods that could have been made out of the additional materials, if their income had been sufficient.

One of the controlling characteristics of a price and profit economy, as we said at the outset, is the fact that all costs, in every stage of production, are advances made with the expectation that they will be recovered eventually in the prices paid by consumers. If they are not recovered in this way, business losses are incurred and production is curtailed. With this fact in mind, and with the aid of Figure 59, we may view from yet another angle the

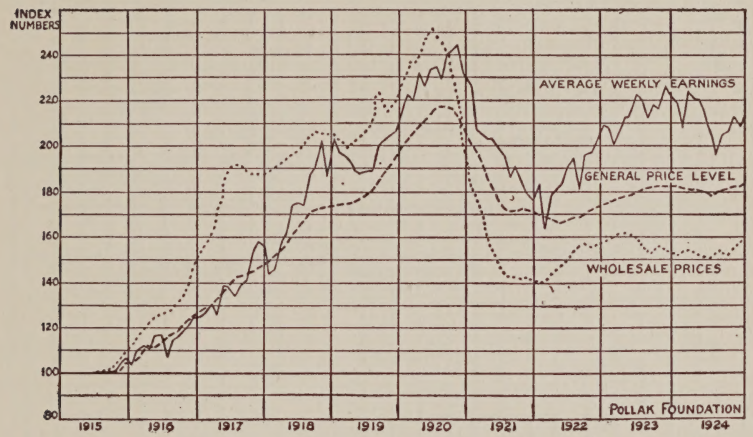


FIGURE 59. WAGE EARNINGS IN MANUFACTURING INDUSTRIES, WHOLESALE COMMODITY PRICES, AND GENERAL PRICE-LEVEL, 1915–24

———— Index of average weekly earnings in manufacturing industries (based on data from the United States Bureau of Labor Statistics)

..... Index of wholesale commodity prices (United States Bureau of Labor Statistics)

– – – – – Index of the general price-level (Federal Reserve Bank of New York)

processes that culminate in curtailed production. For Figure 59 shows that wholesale prices far outran prices in general, from 1915 until the check of productive activity in 1920. The figure shows, also, that wholesale prices far outran even wages in manufacturing industries; and these wages appear from our statistics to have in-

creased faster than total consumer income. Thus the statistics pictured in this chart show that manufacturing costs for labor and materials were increasing more rapidly than the prices which consumers in general were able to pay for the finished products, which fact would become evident when various lags were overcome and efforts were made to sell the stocks which had been piling up along the line.

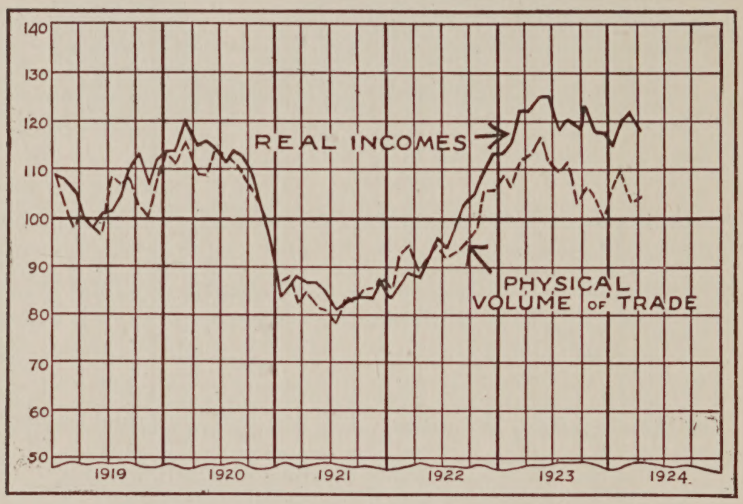


FIGURE 60. REAL INCOMES OF FACTORY WORKERS COMPARED WITH PHYSICAL VOLUME OF TRADE, 1919–24

_____Real incomes (Base: 1919–20 average = 100)
_ _ _ _ _ _Persons' index (Base: line of secular trend = 100)
(Data from studies by William A. Berridge, in *Purchasing Power of the Consumer*, Chicago and New York, 1925; see pp. 61–62)

Still further to compare the income of consumers with the state of business, we may note, in Figure 60, the marked similarity between changes in the real wages, or buying power, of factory workers and changes in the physical volume of trade; and in Figure 61, we may note an equally close resemblance between changes in money

incomes of factory workers and changes in general business conditions. These two charts, which are adapted from the work of William A. Berridge,[11] do not prove that the recessions in business activity were caused by the

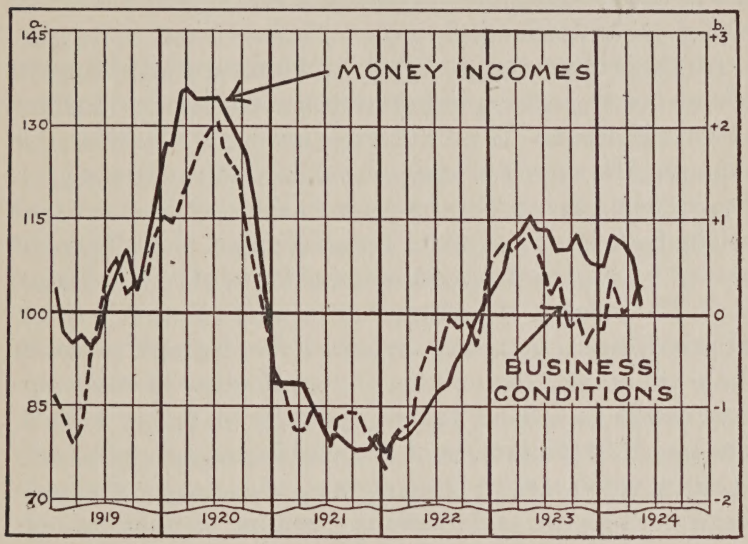


FIGURE 61. MONEY INCOMES OF FACTORY WORKERS COMPARED WITH GENERAL BUSINESS CONDITIONS, 1919–24

————Money incomes (Scale a) (Base: 1919–22 average = 100. Unit = 1 per cent)
– – – – – –Persons' Index (Scale b) (Base: line of secular trend = 0. Unit = one standard deviation)
(Data from studies by William A. Berridge, in *Purchasing Power of the Consumer*, Chicago and New York, 1925; see pp. 61–62)

failure of individual incomes to keep pace with increased production, but they are consistent with this theory. How far these charts go toward substantiating the theory, it is impossible to tell, partly because nobody knows as yet how accurately these indexes of factory wages measure the total incomes of consumers, or how accurately these 'indexes of trade' and 'indexes of business activity' measure distribution of goods to consumers. These in-

dexes, it is true, do not measure exactly what we especially want to measure. However, it is incredible that such marked contractions of the physical volume of trade as those depicted in 1920 and in 1923 by any one of the indexes, could have occurred if real incomes had not also sharply declined.

All these charts (54 to 61) show what regularly happens when society gets a good start toward using its facilities at any approach to productive capacity. Consider, for example, the events of 1923, as outlined above (page 341). During the twelve months prior to the spring of 1923, as prices rose business made notable gains. Employment moved up rapidly from an index of 78 to 96. (See Figure 52.) The volume of manufactures, which rose in a single month from 109 to 117, reached the highest point in three years; and the volume of manufacture of consumption goods rose from 101 in January to 115 in March. The monthly production of automobiles rose rapidly from about 207,000 cars in December to about 344,000 cars in April; and at the same time the volume of building permits reached a high peak.[12] Thus the entire industrial organization of society was making rapid progress on the production side toward achieving the end for which industrial society is organized.[13]

In this situation, what did the common welfare require? It required an end to the rapid rise in prices — there is no doubt about that — but not a fall in prices; not even such a moderate recession in volume of trade as occurred in the middle of the year; certainly not the reduction that took place in the number of workers employed, or the precipitous decline in volume of manufacture from 117 in June to 'normal' in December.[14] Society does not profit from enforced unemployment and decreased production. For the common good, the highest

levels reached in 1923 should have been at least maintained; the 'normal' levels and trends of the past should not be the goals of the future.

It is our contention that during 1923 the flow of money for use in production and the flow of money for use in consumption should have been regulated in such a way as to prevent both a rise in the price-level and a fall in the volume of employment and production. It is our further contention that the statistics and experience which might enable us thus to solve such a problem of distribution, are probably no more difficult to acquire than the statistics and experience which have already enabled us to solve various problems of production.

Balance Sheets of Individual Corporations show how a Deficiency arises

The question remains whether actual balance sheets show that corporations do in fact cause a discrepancy between the goods they produce and the money they disburse. In *Costs and Profits*,[15] H. B. Hastings did not try to answer this question, for he presented the balance sheets of only three corporations, and these for only one year, and made no attempt 'to determine to what extent the mathematical results in these three cases are typical of all business.' The value of the goods produced by these three concerns in the year 1919 did, in fact, exceed the flow of money from these three concerns to consumers. Thus they illustrated, though they did not prove, the point.

A similar analysis of the financial operations of sixteen concerns for a period of ten years, through prosperity and depression, brings us nearer to proof. The results of such an analysis are summarized in Table 29. As there were changes in the capitalization of nine of these concerns during the ten years in question, and as this complicates

the problem, the figures for these concerns are given in Section B. As it was possible in only five cases to take into account all changes in cash, accounts receivable, accounts payable, and inventories, these five cases are given in Section C. The sixteen concerns included in this table are the only ones, except the United States Steel Corporation, for which Poor's *Manual of Industrials* furnishes most of the necessary information for the entire ten-year period. We have omitted the Steel Corporation because the deficit of consumer purchasing power caused by its financial policy is so large as to overwhelm all our other statistics. In this respect, the Steel Corporation is not typical. Whether the sixteen corporations are typical concerns, it is impossible to tell; but there seems to be nothing in the basis of selection which invalidates them for the purpose, and they certainly vary widely in the nature of the business, in location, in size, and in profits.

Among the pertinent facts that this table reveals are these:

The five concerns for which all the essential data appear to be available, namely, those in Section C, caused a net deficit in consumer purchasing power for the ten years of about 48 million dollars.

Of these five concerns, the three which had no changes in capitalization each caused a deficit for the ten years; and together they caused a net deficit of above 45 million dollars.

Of the 30 balance sheets of these three concerns, 20 showed a deficit and 10 a surplus.

With full account taken of all the items in the entire 160 balance sheets covered by this investigation, the net deficit was above 64 million dollars.

A comparison of the figures for concerns 1, 2, and 3, in Section A, with the figures for the same concerns in Section C, seems to justify the conclusion that if full information were available for all sixteen concerns, their net deficit for the period would be larger than appears in the table.

On account of the small number of corporations and the inadequacy of the data, only tentative conclusions can be drawn from this study. At the very least, however, it points to the probability that in a period of business expansion successful corporations, taken as a whole, do not induce a flow of money to consumers sufficient to enable them to buy the increased output.[16]

Conclusions

The available statistics, then, warrant at least these conclusions: first, that progress toward higher standards of living has fallen far short of what we ought to achieve with our available resources, human and material; and, second, that all our indexes of production and distribution are consistent with the theory that the chief cause of our failure to make substantial progress is the failure of the flow of money to consumers, in a period of increased productivity, to keep pace with the flow of goods.

CHAPTER XXXI

CONCLUSION

On the first page of *Money*, we described the anomalous conditions which every now and then prevent the progress of industry: Warehouses bulging with raw materials; factories and machines, more extensive, more efficient, than ever before; millions of idle men and women who are eager to work; many more millions who want the innumerable products which the wizardry of science has made possible, products which these idle workers, by the use of these idle machines, might readily make out of these surplus materials; and, to facilitate production and distribution, a monetary system wholly subject to human control; yet, withal, no immediate means of bringing the materials, machines, men, and money into productive relations with each other.

Now, having analyzed the industrial and financial system which is characterized by these recurrent depressions, we present a final summary of what we have said in *Money* and in *Profits* about that system. It is a money economy, and must so remain; a return to barter is utterly impossible. It is a profit economy and probably must so remain; for no known substitute can entirely take the place of the profit incentive. Competition also must remain, together with security of private property, and adequate money rewards for individual effort, thrift, initiative, and risk-bearing. But in order fully to justify itself, this system must constantly advance the material well-being of the people generally; whatever else it may achieve, the system is defective unless it succeeds in this one dominant aim. To accomplish this aim, it

must call forth a constantly increasing per-capita volume of production, a volume commensurate with the marvelous progress of the arts. This is impossible, unless consumption keeps pace with increased production.

Consumption does not long keep Pace with Production

It is an amazing fact, however, that consumption cannot long keep the pace since, as industry is now financed and corporate savings are now effected, the flow of money to consumers does not long keep pace with the flow of goods; and without a full flow of *money* into consumption there cannot be a full flow of *goods* into consumption. The necessary flow of money is not sustained because, when the output is enlarged, producers do not disburse to consumers, directly or indirectly, an amount of money equal to the final sales price of their products. This failure of industry to provide consumers with enough money to buy its products is inherent in the profit system, for all payments by industry to consumers are advances made with the expectation of recovering from consumers all that has been advanced, with profits in addition. As business expands and profits are thus realized, approximately half the profits are used to produce more goods. In fact, it is the established, approved, and under the present system the necessary, practice of the various industries to distribute only part of the realized profits and to use the rest, in one way or another, to increase capital. Thus the flow of goods which consumers must buy if business is to prosper increases more rapidly than the flow of money to consumers.

Furthermore, even if producers disbursed all their profits and all other incomes, and even if they acted promptly enough — which is impossible since profits cannot be distributed until after they are realized — there

would still be a deficiency of consumer buying; for consumers must save, and usually they save in ways which increase the output of industry. Thus a part of the corporate income which is received from consumers and returned to them, as wages, rent, interest, and dividends, is used by them not to purchase goods, but to bring about the production of more goods; and every dollar which is thus saved instead of spent increases the initial deficiency.

A Penny saved is sometimes a Penny lost

The home, the church, and the school unite with the banker and the economist in glorifying thrift; the precepts of Poor Richard have become the maxims of the Nation. No teacher is orthodox who does not extol saving; and no political platform is complete without a pledge to reduce expenditures. Only the much maligned merchants fail to join in the indiscriminate praise of thrift. And thrift, as it is usually taught, merely means saving money instead of spending it.

What are savings for individuals, however, are not necessarily savings for society. As our industrial order is set up, every man who saves money in certain ways saves it at the expense of somebody else. The dollars which he refrains from spending are real savings for him, provided inflation does not sap their purchasing power; but they are not savings for the community, if production is curtailed because these dollars are not spent in consumption. For the individual a penny saved is a penny earned, but for society a penny saved is sometimes a penny lost. When, for example, a man saves fifty dollars instead of spending it for a rug, the net result is likely to be that one rug is not produced which otherwise would be produced; so that the community, far from gaining by his thrift, has

in effect lost one rug. Evidently, then, although society cannot long live beyond its income, society can suffer chronically from living below its income. The vice of individual over-spending has always been condemned, and for the most part rightly condemned. It is time that we condemned the vice of social over-saving.

Both producers and consumers must save. Since, however, it is consumption and not abstinence that stimulates production, neither producers nor consumers are able to save without to some extent frustrating the social object of saving. This is what we have called the dilemma of thrift.

This deficiency in consumer purchasing power, which is thus caused by the use of corporate and individual savings, is not made up from outside sources. It is not made up from additions to the money in circulation, because these additions, originating as they do principally on the producer side, and being used to turn out goods to be sold at a profit, lead presently to increases in goods which exceed the increases in purchasing power. Thus additions to the money in circulation, made in the ordinary course of financing increased production, add in due time to the excess of supply over demand. Nor is the deficiency made up by the Government, since ordinarily the Government does not disburse to consumers more money than it takes from consumers. Consequently, every forward movement of business culminates in what is called 'overproduction,' but what, in view of the real cause of the trouble, should be called 'underconsumption.'

It is underconsumption which balks all our efforts to sustain prosperity. No sooner do we begin to increase the output of industry at any approach to the rate which the resources of the country make readily possible, than it becomes evident to those who control production sched-

ules that consumers cannot continue to buy commodities, at the rate at which they are being produced, without a fall in prices. And since a fall in prices reduces or wipes out profits, the output of industry is curtailed. Thus in the midst of a system which automatically brings every forward movement to an end, we cannot as producers turn out the goods which as consumers we are eager to enjoy.

Indeed, whenever the indexes of employment and production show substantial gains, bankers, corporation directors, economists, and forecasting agencies urge business men to do, for fear of a recession, precisely what will bring about a recession, namely: to increase working capital, to pay off bank loans, to exercise greater caution in extending credit and in accepting credit, to postpone plant expansion, to enlarge surplus, and to be unusually conservative in paying dividends. Although everybody agrees that society cannot gain its economic ends without increased output, producers reduce their output for fear that they cannot sell it, and workers restrict their output for fear of working themselves out of their jobs. As these fears are well founded, neither capital nor labor is largely at fault for the failure of society to use its productive resources to better advantage.

The fact that the flow of money to consumers is inadequate and the fact that consumers cannot prudently spend even as much as they receive are, therefore, the main reasons why society has not made more progress during the past generation toward the increased production and distribution which is so eagerly desired by all, except possibly the favored few.

Some Anomalies of Current Economics

With the aid of this analysis of the flow of money in re-

lation to the flow of goods, the anomalies of current economics which we mentioned in the first chapter must now seem much easier to understand:

We work hard to pile our shelves full of highly desired commodities; and then we have to stop working because we are unable to take these things off the shelves and enjoy them. Though producing much less than our labor and capital under more favorable conditions could easily produce, we do not distribute to advantage even what we succeed in producing. We so involve ourselves at times that — incredible as it seems at first thought — we should actually benefit by giving the goods away, by sending them abroad to people who cannot pay for them, or even by burning them up. We ascribe our troubles in part to the extravagant buying of consumers at the very time when industry slows down because consumers are not buying enough. Then, while industry wanes because it lacks consumers, we put taxes on consumption; and, precisely when business needs increased consumer income, we reduce that income by reducing wages. We strive to send more and more of our own real wealth abroad, but we do not like to accept real wealth in exchange. We feverishly build additional capital facilities before we can use to advantage what we already have. By thus investing our savings, instead of consuming them, we deny ourselves to-day in order that we may have a greater output in the future; although already we can produce more than we are able to use. All this, which may have seemed at the outset of our discussion like confusion worse confounded, must now appear in a new light.

Economic Calamity sometimes an Economic Blessing

Why, for example, are wars good for business? How

can a country gain by the destruction of its real wealth? Why is it ever advantageous to pay the unemployed to do nothing? In short, how can an economic calamity be an economic blessing?

It is one of the paradoxes of our industrial system that wars, earthquakes, fires, and floods sometimes provide the stimulus to productive activity which the economic system itself is powerless to provide. For whenever consumer purchasing power is lagging behind supply, and the price-level is sagging, and employment is falling off, the destruction of goods may help to sustain prices, employment, and production. Thus it may prevent a greater economic loss than that due to the disaster. For wealth which is not produced because men, machines, materials, and money are idle, is wealth lost.

Here, also, we find a new answer to the favorite question of the old lyceums: Do extravagant expenditures by the wealthy benefit the wage-earners? That question has not been fully answered in the past, because it has not been considered with reference to the circuit flow of money and the deficiency of purchasing power. At times, owing to this deficiency, anything at all, wasteful or not, which disposes of surplus supplies may help wage-earners by bringing about increased employment. But if the industrial system yielded to consumers enough money to buy its products, the waste of wealth by calamity, by construction of useless capital facilities, or by the extravagance of the well-to-do would be a net loss to society. This fact alone is reason enough for seeking to improve the system. A system which must resort to the makeshift of paying the unemployed to do nothing, a system which cannot steadily increase its wealth without wasting some of the wealth which it has already created, is not an efficient mechanism.

Deficient Demand causes Fear of Imports

Again, why is every nation eager to send its products abroad but loath to accept goods in return? Why this aversion to accepting real wealth? Why is an excess of imports over exports an 'unfavorable' balance of trade? And why are England and France afraid to have Germany pay indemnities with commodities? Among nations, apparently, it is truly 'more blessed to give than to receive.' Yet, if we consider only the tangible goods, and ignore 'the mere medium of exchange,' it seems clear that any country which imports more real wealth than it exports has made a real gain. But the gain is not real if its people cannot buy the imports; storing them in warehouses until they rot does nobody any good. Here, again, the chief problem is buying power. It is not the only problem, to be sure, since various industries are differently affected by imported goods; but it is the chief problem. Business men have reason to fear that consumer demand will not be sufficient to absorb the domestic output and the foreign goods in addition. If, on the other hand, the flow of purchasing power to consumers at home were equal to the influx of commodities — if the annual equation were thus maintained — the net addition to wealth received as imports would be a net gain.

Mr. Hoover's conclusion concerning the necessity of exporting our 'surplus' amounts to a declaration, with which the business world and most of the economic world seem to agree, that there is no possible way of giving our own people enough money to buy what they can readily produce. 'To me,' he says, 'there is only one remedy, and that is by the systematic, permanent investment of our surplus production in reproductive works abroad.'[1] That is to say, our money and profit economy so obstructs the flow of goods to our own people that we must regularly

send abroad a substantial part of our output; and, since the income of consumers abroad is also insufficient to buy our surplus, and never can become sufficient, we must permanently take our pay in foreign capital goods — in factories, mines, power plants, and railroads.

What does this mean? It seems to mean that if we work very hard, we can send more wealth abroad and thus acquire more capital abroad, and thus possibly receive more interest and dividends from abroad, wherewith to acquire still more capital abroad, and so on, generation after generation, without finding any way whereby we, or our children, or our children children's, can ever benefit greatly by our increased productivity. According to this theory, our own standard of living must remain the same as though we had never produced all this 'surplus' wealth.

The complacency with which this theory is accepted is amazing, for it amounts to an admission of our main contention concerning the inherent flaw in the established economic system. It is, in effect, an indictment of the prevailing methods of distributing the products of industry.

The Right Flow of Money is the Chief Need

The greatest economic need, therefore, though by no means the only need, is a flow of money to consumers which, after providing for savings, would always be approximately equal to the flow of finished goods. The certainty that people would have enough money to buy total output, no matter how large it might be, would be sufficient to induce both employers and employees to increase the output, year after year, for the very good reason that higher real wages and higher real profits would depend mainly on increased output. If, to the

highly efficient system which now provides money for production, we could add an equally efficient system for providing money for consumption, we could make rapid and sustained progress toward realizing the potential output of industry; rapid progress, therefore, toward higher standards of living.

Consider, in the light of this analysis, some of the measures which are now used to improve economic conditions: minimum wage laws, profit-sharing plans, workers' control, employment exchanges, regularization of industry, coöperative societies, labor banks, conciliation boards, efficiency systems, graduated income taxes, government price control, and the like. How can such measures, whatever their worth, solve the economic problem? All these measures put together cannot provide the necessary incentives and the necessary funds for continued enlargement of output. If every advance in productivity is, in fact, halted because consumption cannot keep the pace, adequate income for consumers is the only adequate remedy; and all these other devices are at best merely palliatives. Whatever else they can do, they cannot make consumer buying-power, in a money and profit economy, increase at the rate of increased production.

It is true that, even with adequate total consumer demand, business would still be subject to disturbing influences, chief among which would be unpredictable changes in the demand for various goods. For, even if total demand of consumers were adequate, fashions and politics, inventions and speculation, earthquakes and the weather would make some lines of business more prosperous than others. But all these disturbing influences put together could not substantially check prosperity in general, if enough money were distributed to consumers to sustain the price-level of goods in general. Danger

there would still be, as in a barter society or in a communistic society or in any other society, of producing relatively too much of certain things; but this danger could not hold back industry as a whole, for there would be no danger whatever of producing too much of things as a whole. Any one who thinks that the danger of producing relatively too much of this or that would of itself prevent continued prosperity, should bear in mind the fact that this danger, *in addition to the ever-present danger of producing too much of things in general*, does not even now prevent industry from going forward rapidly at times; and the further fact that these forward movements do not come to an end, even when the over-expanded industries suffer, as long as demand in general keeps pace with production in general. Sustained depression of business accompanied by sustained demand is, in fact, as far from possible as drouth accompanied by heavy rains.

This conclusion rests securely on the simplest processes of arithmetic. If demand as a whole were adequate, whatever certain firms and certain districts lost would necessarily be gained by other firms and other districts. Trade could not contract in some places without expanding in others. Paralysis would not be contagious. No longer would there be a vicious spiral of deflation whereby troubles would be passed along from industry to industry in a cumulative process. For business as a whole, overproduction, depression, and financial loss would be impossible. In fact, adequate, sustained consumer demand would do more than any other means now within human control toward increasing wealth, abolishing poverty, maintaining employment, solving labor problems, increasing good will among men generally, and maintaining the peace of the world.

No means of preventing war holds out such large, immediate possibilities as this. Whatever mingling of causes may have brought about the World War, that War was in large part a struggle for outside markets among highly organized industrial nations which had found no means of giving their own ill-nourished, ill-clad, ill-housed people enough money to buy what they themselves had succeeded in producing. It is, therefore, difficult to exaggerate the importance of finding a means of sustaining purchasing power. The next world war, if it does come, may well be the last war — at least the last war in which the present great nations will have any interest, for it may well destroy civilization itself.

The Conclusion of Our Argument

This, then, is the conclusion of our argument:

Progress toward greater total production is retarded because consumer buying does not keep pace with production. Consumer buying lags behind for two reasons: first, because industry does not disburse to consumers enough money to buy the goods produced; second, because consumers, under the necessity of saving, cannot spend even as much money as they receive. There is not an even flow of money from producer to consumer, and from consumer back to producer. The expansion of the volume of money does not fully make up the deficit, for money is expanded mainly to facilitate the production of goods, and the goods must be sold to consumers for more money than the expansion has provided. Furthermore, the savings of corporations and individuals are not used to purchase the goods already in the markets, but to bring about the production of more goods. Under the established system, therefore, we make progress only while we are filling the shelves with goods which must

either remain on the shelves as stock in trade or be sold at a loss, and while we are building more industrial equipment than we can use. Inadequacy of consumer income is, therefore, the main reason why we do not long continue to produce the wealth which natural resources, capital facilities, improvements in the arts, and the self-interest of employers and employees would otherwise enable us to produce. Chiefly because of shortage of consumer demand, both capital and labor restrict output, and nations engage in those struggles for outside markets and spheres of commercial influence which are the chief causes of war.

How we have fared as well as we have

To many people our argument may seem to prove too much. How, they may ask, has it been possible to make the great material progress which is evident on every hand? In the United States, during the past century, the output has doubled again and again; railroads have spanned the continent; great cities have grown up on barren plains; electric lights, telephones, automobiles, phonographs, motion pictures, radio sets, and thousands of other achievements of science and industry, which were wholly unknown a generation or two ago, are now in widespread use. If it is true that the flow of money to consumers is insufficient to buy the output of industry, how has this great output been disposed of?

To a large extent, let us note at once, by methods which are evils in themselves; necessary evils, it seems, on account of deficient consumer income. Some of the stocks which could not be sold have been allowed to spoil or become obsolete. Others have gone into large, permanent increases in inventories. Still others have been wasted in making additions to industrial equipment far beyond

the requirements of the markets. The exact extent of this waste is unknown; but it would certainly be understating the case to say that products to the value of a billion dollars a year are used in creating capital facilities which are never justified by the demand of consumers.

Larger still are the stocks of commodities which are sold at prices which entail business losses; and such losses, as we have seen, are extensive. Indeed, the chief means of getting business under way after a depression is selling stocks at prices which not only wipe out all the gains of tens of thousands of men but also set back industry as a whole. This method not only discourages the competent leaders who survive, and not only eliminates the incompetent ones who ought to be eliminated, but also eliminates many of the competent who, in the interests of society, ought to be retained and encouraged. Thus business losses are borne by the community as well as by individuals.

Another evil which has offset part of the deficiency of money incomes is a large, permanent increase in consumer debts. Much of the output which otherwise could not be distributed, consumers have bought through the extensive mortgaging of their future incomes; and in recent years business has felt obliged to resort more and more to this method of making sales. Such a device, however, which at best cannot be extended indefinitely, is itself to a considerable extent an evil. What people need is the means of paying for goods, rather than the means of acquiring goods for which they cannot pay.

All these means of disposing of surplus goods, however, would not have enabled us to do even as well as we have done, had it not been for permanent increases in the volume of money in circulation. Not only have we greatly increased the production of gold; but, by one

device after another, we have made a given weight of gold support a larger and larger volume of currency and bank credit. In particular, we have extended the use of checks on bank deposits until they are now used in nearly all large transactions. There is no reason to suppose, however, that improvements in our systems of currency and credit will come, even to the extent that they have come in the past, without deliberate planning. Moreover, if the volume of money is to increase in the future at the rate at which it has increased in the past, the additions must be very much larger than they have been in the past.

Important in this connection is the fact that large permanent additions to the volume of money in circulation have been made in the process of financing permanent additions to capital equipment, inventories, and public debts. Such uses of money, as we have explained at length,[2] add to consumer incomes without adding to the goods which consumers are expected to buy. In fact, it is theoretically possible to offset all deficiencies in consumer income by disbursements made in connection with the construction of industrial equipment, the accumulation of stocks, and public works. At times, no doubt, on account of such expenditures, the flow of money to consumers has increased even more rapidly than the flow of consumers' goods.

These, then, are some of the ways whereby, in spite of inadequate consumer income, we have contrived to get along as well as we have. The main reason, however, why we do not create surplus stocks at a much faster rate is because we waste so much wealth, and fall so far short of making full use of improvements in the arts, additions to capital facilities, and potential efficiency of workers. We have thus wasted our resources, human and material, largely because of limited markets. Lack

of ingenuity in getting goods consumed has prevented us from fully using our ingenuity in getting goods produced.

Finally, we should take account of the fact that, in the United States, the past century has been a period of exploitation of natural resources and development of new productive facilities which is unparalleled in history. This expansion has included the construction of railroads, power plants, water works, and other public utilities sufficient to meet many of the needs of a generation to come; and in this connection billions of dollars have been disbursed as wages. These capital investments have helped consumer buying to keep up with the actual output of industry; for, as our Cases show, such investments, when they involve increases in the volume of money, induce a flow of money to consumers in advance of the flow of new goods. In fact, as long as capital facilities are created at a sufficient rate, there need be no deficiency of consumer income. To serve that purpose, however, facilities must be increased at a constantly accelerating rate, and we have no reason to believe that, even in the United States, such a rate can long be maintained. On the contrary, it is doubtful whether we can long maintain the present rate. It is more likely that the United States, with its era of pioneering over, will presently have to contend with the serious economic conditions which now confront the old industrial countries of Europe. When that time comes, deficiencies in consumer purchasing power will not be offset by extraordinary advances to consumers made in connection with the rapid growth of new industrial equipment. Nor will the laws of economics, if left alone, 'automatically' solve the problem.

But we have not fared very well, after all

Thus the system has worked, after a fashion. But at

what a tragic cost! Even the cold statistics which we have presented to measure the failure of the industrial world to realize its productive possibilities give some idea of the price we pay in human suffering. We should have no cause for resting content, even if we were sure we could fare as well in the future as we have fared in the past. A vast capital structure, we have, it is true, and almost miraculous scientific achievements, and lavish expenditures for education; but in the past generation there have been no gains in human welfare at all comparable with the growth of industrial equipment and the improvements in the arts. On the contrary, there are millions who wrest but a bare subsistence from the hardest toil; millions more who are periodically thrown out of work; millions more who after long years of labor and self-denial find themselves dependent on charity; millions who are undernourished, ill-clad, ill-housed, and without the means of commanding even adequate dental and medical care. And all the while virtually every industry in the country has far larger capacity for producing wealth than it is able to use.

'Anyhow,' it is said, 'the System works' [3]

'Anyhow, the system works.' This is the usual answer to every criticism of the established order. Is it not remarkable that so many business men have complacently assumed, with no attempt to analyze the processes, that the system itself cannot be at fault, that 'somehow' enough money gets back to consumers to enable them to buy the goods that are being produced? These men do not assume that 'somehow' the goods will get produced. With great pains and persistence, they study the technical processes of production and measure the daily output. But they do assume that 'somehow' the goods will

get consumed. Hardheaded business men who scorn the blind faith of fanatics, themselves go ahead expanding operations in the blind faith that industry can 'somehow' obtain from consumers more money than it gives them. Even among the leaders of business are many men who contend that all the operations of commerce and finance, including the flow of money to consumers, are largely automatic and will correct themselves if left alone; that discontent with the established system is confined mainly to disgruntled ne'er-do-wells, who have only themselves to blame; that, after all, 'the system works' and this is a very good world in which to live. No wonder that men who have any insight at all into the defects of the system are distressed over the complacency of some of those who, while having at their command large powers to help matters, insist that everything is about right as it is.

Most economists also appear to be satisfied that the established system, except in minor respects, works very well. They even declare that all the major problems of economics have been solved, and that nothing more is needed but relatively unimportant refinements of accepted theory. Alfred Marshall says that 'qualitative analysis has done the greater part of its work — that is to say, there is general agreement as to the characters and directions of the changes which various economic forces tend to produce.' [4] Most of the orthodox textbooks, all much alike in substance, are equally complacent. Although they purport to cover the principles of economics, these books rarely give any suggestion that money hinders as well as facilitates the production and exchange of goods; that the processes of financing increased output do not yield to consumers the means of buying the output; that the accumulation of profits often drys up the sources of future profits; that corporate savings, which are

declared to be essential for increasing production, have a part in curbing production; and that thrift, as commonly lauded and practiced by individuals, often defeats the social aim of thrift.

Clearly, then, if the main contentions of *Money* and *Profits* are sound, much of our traditional economic teaching is unsound, and overlooks some of the fundamentals which must be better understood before it will be possible to solve the economic problem.

The Problem can be solved

The problem can be solved. All its chief factors are subject to human control. In order to reach a solution, it is not necessary to abolish selfishness, stabilize human tastes, regulate the weather, or remove the sun spots. Drouth and floods, it is true, fire and frost, earthquakes and pests are not entirely controllable; but such acts of God cause far less economic loss than acts of men. Inadequate consumer demand is not a visitation of Providence. Yet there are many who ascribe business depressions to immutable natural law. As in physics, so in economics, they say, every action is and must be followed by an opposite and equal reaction. The farther business moves forward in a period of expansion, they contend, the farther back it must slip when the reaction comes. This is, in truth, about what happens under the present economic organization of society. But it does not result from natural law; it results from financial methods deliberately devised by man. The ingenuity of man substituted money for barter, and the admirable Federal Reserve System for a poorer system; and if necessary the ingenuity of man can devise something better still. Systems of currency, bank credit, taxation, tariffs, and public works have been contrived by man, presumably for his

own benefit; and for his benefit he can alter these systems at will. They are no more sacred than flintlock muskets. There is no warrant for comparing the 'laws of business depressions' with the laws of physics; there is no scientific basis for the Economics of Despair.

Far-reaching changes are sure to come, for the people are, and of right ought to be, dissatisfied with a system which uses our vast resources, human and material, to such poor advantage; and the people are becoming increasingly aware of their political power. The only question is whether changes will be made stupidly or intelligently, by destroyers or by builders.

The trouble in the past has not been our failure to understand economic theories, but the fact that nobody has yet explained, with any approach to precision as to quantities and time relations, how the mechanism works when it does work and what happens when it does not work. Above all else, we need more exact knowledge concerning the flow of consumers' goods in relation to the flow of consumers' income and, on the basis of such knowledge, the wisdom and courage to act. The immediate task before us is to take human nature and the present structure of society very much as they are and, conserving all that is sound in both, to modify the structure year after year in various ways so that human beings, with all their imperfections, will be enabled gradually to create and to enjoy better products and more of them. Material wealth, it is true, does not always carry with it the durable satisfactions of life; but for most human beings — taking them as they are and as they are likely long to remain — gains in the things which money will command are prerequisite to higher gains. Indeed, it is doubtful whether any other way of helping humanity holds out such large immediate possibilities.

Here, then, is a challenge to youth — a challenge as well to all those now in authority who still have the initiative, versatility, energy, and confidence of youth! Here is an opportunity for young men to forge ahead — an opportunity as well for older men to justify the trust that has been placed in them. The last frontier has not been reached; high adventure awaits the daring. Difficulties and dangers there are, enough to give zest to the endeavor, but not enough to daunt the spirit of the pioneer. The economic problem can be solved.

THE END

APPENDIX
NOTES TO ALL CHAPTERS
TABLES

APPENDIX

NOTES TO ALL CHAPTERS

Chapter I

1. William Trufant Foster, and Waddill Catchings, *Money*, Pollak Publication, Number 2, Boston, 1923.
2. This distinction between the perfect *barter* balance of supply and demand, and the inevitable unbalancing of supply and demand due to the fact that money is suspended purchasing power, is discussed at length in Chapter XII of *Money*. The theory we have there expounded is the exact opposite of much that is taught. Many textbooks, old and new, insist that 'all trade is, of course, barter'; that 'trade is still barter and the young economist must . . . think in goods'; that 'trade, after all, is but a perfected system of barter,' and so on. These books do not take into account the crucial difference between an exchange of goods for goods, and an exchange of goods for money.

   It is true, they say, that barter trading is perfect in the completed exchanges, but often there is no exchange because there is not a 'coincidence of wants,' that is to say, there is no guarantee that. when a peasant takes a cow to market, he will find there a man who wants to trade a cart for it. This is a fact, but it is irrelevant. When anybody will barter anything for a cow, the cow is one man's supply and another man's demand: the balance is perfect. When, on the other hand, nobody will give anything for the cow, *it is neither supply nor demand.* Therefore it can have no part in overthrowing the balance; it can affect neither side of the annual equation. But money is *always* demand; it is never supply. It is suspended purchasing power, hanging over the market, ready at any time to upset the balance.

Chapter II

1. Sidney and Beatrice Webb, *The Decay of Capitalist Civilization*, New York, 1923; p. 88.
2. The following quotations are from writers who give profits a central place in economics; many other writers do not:

   'Profits are the heart of our present industrial system: they are the end for which business men strive and their attainment is the surest mark of success. Information concerning them has

been most jealously guarded. The extent of their fluctuations and the cause of their variation are the darkest part of economic theory to-day.' (David Friday, in *The New Republic*, July 25, 1923.)

'The theory of profit has remained one of the most unsatisfactory and controversial divisions of economic doctrine.' (Frank H. Knight, *Risk, Uncertainty, and Profit*, Boston, 1921; p. 22.)

'The rate of profits or earnings on investment has in the nineteenth century come to take the central and dominant place in the economic system.' (Thorstein Veblen, *The Theory of Business Enterprise*, New York, 1904; p. 89.)

'Industry is carried on for the sake of business, and not conversely; and the progress and activity of industry are conditioned by the outlook of the market, which means the presumptive chance of business profits.' (*Ibid.*, pp. 26–27.)

'Until we know the course of profits and the forces which underlie their fluctuation, and until we have discovered how they affect wages and prices, the public mind must remain in darkness and confusion.' (David Friday, *Profits, Wages, and Prices*, New York, 1920; p. 11.)

'Our whole existing fabric of industry is built upon the confidence of the commercial world in endlessly accumulating profits and dividends. The instant when that confidence is undermined by any united expression whatever of the will of the people to arrest that process, this whole fabric must collapse as a unit.' (S. A. Reeve, *Modern Economic Tendencies*, New York, 1921; p. 777.)

'All our system revolves around that central sun of profit-making.' (John Spargo, *The Common Sense of Socialism*, New York, 1911; p. 75.)

In 1919, after the incentive of personal profit had been lost to Russia, Lenine admitted that production fell off; but he maintained that the chief cause was the economic blockade. Concerning this claim, Herbert Hoover said, September 16, 1919: 'The apologists of this *débâcle* are telling us that it is due to the Allied blockade and to various other oppositions, but any one with a rudimentary knowledge of Russia knows that they did have within their borders ample supplies of food, coal, oil, wool, flax, cotton, and metals, and the factories with which to work them, in abundance, and that their *sole deficiency is human effort*.' (*Public Service:* 189, November 25, 1919; p. 10.)

3. We agree with J. A. Hobson. 'There are those,' he says, 'who hold that the solution of this problem can only be achieved by a destruction of the entire fabric of "the capitalist system." For only

thus, they hold, can the "surplus income" which causes our maladies be properly absorbed. If they can show that some such wholesale revolution of our economic arrangements is politically feasible, and that their new system will satisfy the needs of high productivity as well as of equitable distribution, they are right to go behind the progressive policy here cited. I am satisfied to leave the proposals for reform at a point that is in line with the actual movements which I perceive to be in operation in most modern industrial communities, disbelieving both in the need and the practicability of wholesale sudden transformations, either in human nature or the institutions it imposes.' (J. A. Hobson, *The Economics of Unemployment*, London, 1922; pp. 117–18.)

4. Sidney and Beatrice Webb, *The Decay of Capitalist Civilization*, New York, 1923; p. 77.
5. *Ibid.*, pp. 84–85.
6. See James A. Bowie, *Sharing Profits with Employees*, London, 1922; chap. IV.
7. Nassau William Senior, *Political Economy*, London, 1854; pp. 26–28.

   See Paul H. Douglas, 'The Reality of Non-Commercial Incentives in Economic Life,' in *The Trend of Economics*, New York, 1924.

   See, also, J. A. Hobson, *Incentives in the New Industrial Order*, London, 1922.
8. Harry F. Ward, *The Profit Motive*, New York, 1924; p. 40.
9. 'The socially minded business man has a greater obligation to succeed than any other type of business man. He must remember that the first business of reform is to succeed. Otherwise the innovation stands no chance of being imitated. Social progress suffers when it is sponsored by well-meaning but untrained minds. The impulse toward justice is bound to be abortive unless it recognizes the obligation of success. Shall I be guilty of straining for a paradox if I say that, from the long view, unsuccessful business morality is immoral?' (Edward A. Filene, *The Way Out*, New York, 1924; p. 99.)
10. For example, J. A. Hobson, in *Economics of Unemployment*, London, 1922; p. 54.
11. Werner Sombart, *The Quintessence of Capitalism*, New York, 1915; p. 125.
12. Sidney and Beatrice Webb, *The Decay of Capitalist Civilization*, New York, 1923; pp. x–xi.
13. Chapter XIX, in Part V, below.
14. National Bureau of Economic Research, *Income in the United States*, New York, 1922; vol. II, pp. 332, 382.

Chapter III

1. *Money*, Pollak Publication, Number 2, chap. XVIII. See, also, William Trufant Foster, 'The Circuit Flow of Money.' *American Economic Review*, September, 1922; and Hudson Bridge Hastings, 'The Circuit Velocity of Money,' *American Economic Review*, June, 1923.
2. See Irving Fisher, *The Nature of Capital and Income*, New York, 1906; chap. IV.
3. See Paul H. Douglas, *Real Wages*, Pollak Publication, Number 9, Boston, 1925.
4. National Bureau of Economic Research, *Income in the United States*, New York, 1922; vol. II, p. 337.
5. See Irving Fisher, *The Nature of Capital and Income*, New York, 1906; pp. 168–69.

   To what extent this real income brings human satisfactions is a question we shall not consider here, though it is clearly important. On every hand we see evidence that the pleasure to be derived from money and from the material wealth which it commands depends mainly on mental attitudes. A raise of five dollars a week in the pay of a bank clerk is likely to bring greater satisfactions than ten times as much money would bring to a bank president. In fact, a given number of dollars does not bring the same degree of satisfaction to any two human beings; and human satisfactions should be the goal of economic activities. For that reason all the conditions which affect this subjective income have a central place in any comprehensive study of the means whereby the economic activities of the world may be so directed and the products so distributed as to yield to the people generally the largest possible satisfactions.
6. See Chapter XV, below.

   See the chapter on 'Profits' in the *Outlines of Economics*, by Ely, Adams, Lorenz, and Young (4th edition), New York, 1923.
7. *Money*, Pollak Publication, Number 2, chaps. IV and V.

Chapter IV

1. Thomas Nixon Carver, *Principles of Rural Economics*, Boston, 1911; p. xx.

Chapter V

1. Harry F. Ward, *The Profit Motive*, New York, 1924; p. 10.
2. J. B. Clark, *The Distribution of Wealth*, New York, 1899, p. 29.
3. For a different view, see Frank H. Knight, *Risk, Uncertainty, and Profit*, Boston, 1921; p. 20.
4. *Ibid.*

Chapter VI

1. See *Money*, Pollak Publication, Number 2, chap. XVII, on 'Money in Consumption.'
2. See *Money*, Pollak Publication, Number 2, chap. XII, on 'Money as Suspended Purchasing Power.'

   Those who question the condensed statements in this chapter might be interested in the more nearly adequate exposition of the same ideas in *Money*.
3. The significance of the fact that the typical business enterprise thus advances money in the present, with the expectation of getting it back from consumers in the future, with a profit added, is discussed at some length in *Money*, Pollak Publication, Number 2, chap. XVI, on 'Money Advanced in Production.'
4. Harry W. Laidler, *Socialism in Thought and Action*, New York, 1920; pp. 18–20, in which is quoted Wells and others, *Socialism and the Great State*, New York, 1912; p. 82.

Chapter VII

1. Louis D. Brandeis, *Other People's Money*, New York, 1913; p. 92.
2. R. H. Tawney, *The Acquisitive Society*, New York, 1920; p. 124.
3. 'Any bank which has to issue a statement of its position is bound to issue a strong one, or it would at once be the subject of cavil and suspicion, which might have unfortunate results. Hence it is that publicity has compelled the banks to keep themselves strong, in wholesome fear of the criticism of their rivals and of other members of the monetary body. . . . The strength of the resistance to the more frequent application of publicity to the position of the banks is in itself a sufficient evidence of the urgent necessity of the reform.' (Hartley Withers, *The Meaning of Money*, New York, 1909; pp. 113–14.)
4. See *Money*, Pollak Publication, Number 2, chap. XI. Also, Chapter XIX, below.
5. See A. T. Hadley, *Economics*, New York, 1898; p. 113.
6. See Wesley Clair Mitchell, *Business Cycles*, Berkeley, 1913; p. 596.
7. See *Agricultural Economics*, issued by the United States Department of Agriculture, June, 1922; especially pp. 60, 64, and 96.
8. Herbert Hoover, Letter to the Attorney-General, December 11, 1923, in the *Journal of the American Statistical Association*, September, 1924; p. 393.
9. *Ibid.*

Chapter VIII

1. *Money*, Pollak Publication, Number 2, especially chaps. IV and V.

   None the less true is this if we admit that, *under existing economic*

conditions, a uniform price-level is neither possible nor desirable. In later chapters of this book we shall endeavor to show that, as production is now financed and as profits are now distributed, the desired relationship between the making of goods and the using up of goods cannot long be sustained. Wherever business is subject to sharp cyclical fluctuations, shifts in the price-level become necessary at the top in order to dispose of excessive stocks, and at the bottom in order to bring about increased production more rapidly than would otherwise be possible. Maladjustments between money spent in production and money spent in consumption are sure to develop in such a way that nothing but a change in price-level can bring about a quick resumption of business activity.

Chapter IX

1. 'If competition worked without let or hindrance, pure business profit would be annihilated as fast as it could be created.' (J. B. Clark, *The Distribution of Wealth*, New York, 1899; p. 410.)
2. Harry F. Ward, *The Profit Motive*, New York, 1924; p. 7. This statement we shall consider in Part IV.

Chapter XI

1. *Statistics of Income from Returns of Net Income for 1921*, United States Treasury Department, Washington, D.C., 1923; pp. 10–11.

   See, also, Richard T. Ely, *Outlines of Economics* (4th edition), New York, 1923; pp. 518, 526.

Chapter XII

1. Ralph C. Epstein, 'Which Business Makes the Highest Profit?' *System*, October, 1924; p. 420. Source: 'Corporate Earnings and Government Revenues.'

   The same study, with added statistical refinement, appears in the *Quarterly Journal of Economics*, February, 1925. The term 'profits' in this paper is used as synonymous with the term 'per cent of net income to invested capital,' as it appears in *Corporate Earnings and Government Revenues*, Senate Document No. 259, 65th Congress, 2d session, Washington, 1918.

   For a comparison of the profits of 158 corporations (1912–14) with the rates allowed by public utility commissions, see J. E. Sterrett's article in the *American Economic Review*, March, 1916.
2. From a report of the Federal Trade Commission. See Table 5, Appendix.
3. From a study by the Standard Statistics Company of New York.

4. *Statistics of Income from Returns of Net Income for 1921*, United States Treasury Department, Washington, D.C.; pp. 10, 11.
5. Bureau of Business Research, Harvard University, Bulletin No. 36; p. 56.
6. *Ibid.*, Bulletin No. 38; p. 50.
7. Bureau of Business Research, Harvard University, Bulletin No. 34; p. 26.
8. *Ibid.*, Bulletin No. 37; p. 42.
   (These bulletins of the Bureau of Business Research of Harvard University are summarized in M. T. Copeland, *Principles of Merchandizing*, Chicago, 1924.)
9. *Statistics of Income from Returns of Net Income for 1921*, United States Treasury Department, Washington, D.C.; p. 13.
10. Ralph C. Epstein, 'Which Business Makes the Highest Profit?' *System*, October, 1924; p. 420. Source: 'Corporate Earnings and Government Revenues.'
11. The term 'average business profits' is as misleading as would be the term 'average price fluctuations.' The useful expression is the 'mode' of a frequency table showing profit rates of a large number of concerns in a given year, precisely as the corresponding 'mode' for price fluctuations is the expression we need for practical purposes.
12. David Friday, *Profits, Wages, and Prices*, New York, 1920; chap. II.
13. William E. Dunn, 'A Survey of Industrial Profits,' *Bradstreet's*, October 11, 1924. The percentages are the ratios of net profit and net worth; i.e., rate of earning on investment.
14. Robert S. Brookings, *Industrial Ownership*, New York, 1925; p. 92. The capital stock and bonds have been taken to measure the investment. The earnings of 7.75 for the twenty large industrials compares with earnings of 8.34 per cent for all national banks during the same period. The figure for the banks is the percentage of net earnings to capital, surplus, and undivided profits.

Chapter XIII

1. David Friday, *Profits, Wages, and Prices*, New York, 1920; pp. 117, 169.

Chapter XIV

1. David Friday, *Profits, Wages, and Prices*, New York, 1920; p. 124.
2. We should bear in mind the fact that these official *Statistics of Income* include only the incomes of the relatively well-to-do. Most of those who receive wages do not make income-tax reports. On

the other hand, reporting of wages and salaries, among those who do make returns, is probably more nearly complete than reporting of income from business. For the purpose of income-tax reports, it is easier to manipulate profits than income from other sources; and income from tax-free securities is not reported at all. We should also take account of the fact that lower income groups are included in the statistics of the later years.

3. Scott Nearing, *Income*, New York, 1915; pp. 159–60, 162.
4. Sidney and Beatrice Webb, *The Decay of Capitalist Civilization*, New York, 1923; pp. 17–19. For authority they refer to James MacKaye, *Americanised Socialism*, 1918.
5. 'In the highly organized industries conducted on a large scale, the pay of employees, including the salaries of officials, absorbs in most years some 69–72 per cent of the net value product. The remaining 31–28 per cent is the share of 'management and capital. . . . From 1909 to 1918, the extreme fluctuations in the share of management and profits varied from 33 per cent of the net value product in 1916 to 23 per cent in 1918.' (National Bureau of Economic Research, *Income in the United States*, No. 1, New York, 1921; pp. 145–46.)
6. This estimate agrees with that made by John R. Commons, in his review of *The Decay of Capitalist Civilization*, in *Political Science Quarterly*, vol. XXXVIII, p. 674. As Professor Commons remarks, the basis of any such estimate must be the fact that most of the doing is done by owners who are virtually 'marginal' owners. That this is true of most farmers, our largest group of owner-doers, is a matter of common observation.
7. John Maynard Keynes, *The Economic Consequences of the Peace*, New York, 1920; pp. 19–20.

Chapter XV

1. Sidney and Beatrice Webb, *The Decay of Capitalist Civilization*, New York, 1923; p. XV.
2. Hartley Withers, *Poverty and Waste*, London, 1920; p. 19.
3. Richard T. Ely, *Outlines of Economics*, New York, 1923; pp. 156–157.
4. Except in so far as commodities are sold, and prices thereby affected, before the commodities have been produced.
5. *Money*, Pollak Publication, Number 2; p. 224.

Chapter XVI

1. The alternative to freedom of choice is considered in Chapter VI.
2. The National City Bank letter, New York, May, 1922.
3. George W. Gough, *Wealth and Work*, London, 1920; p. 248.

Chapter XVII

1. Chapter II, page 16.
2. In this chapter, we have used parts of our discussion of the same subject in *Money*, pages 188–211. In that book the reader will find a treatment of the subject that is more nearly adequate.

   There is an effective use of the dollar-vote analogy in Thomas N. Carver's *Essays in Social Justice*, Cambridge, 1915; chap. v.
3. Harry F. Ward, *The Profit Motive*, New York, 1924; p. 23.
4. *Ibid.*, p. 20.
5. 'The mass distribution which will follow mass production as a matter of course will find the biggest total profit in selling an enormous number of articles at the lowest possible profit per article. This means that the business man of the future, whether manufacturer or merchant, will make more money by reducing prices than the business man of the past has ever made by raising prices. He will strive always to bring prices to a lower and lower level, not from an idealistic social motive, but simply because it will be the best business policy.' (Edward A. Filene, *The Way Out*, New York, 1924; p. 99.)
6. Harry W. Laidler, *Socialism in Thought and Action*, New York, 1920; p. 26.
7. George Soule, *The Accumulation of Capital*, New York, 1913; p. 14.
8. See, for example, Arthur Kitson, *A Fraudulent Standard*, London, 1917.
9. See Thomas A. Edison, *A Proposed Amendment to the Federal Reserve Banking System*, Orange, N.J., 1923.
10. Harry F. Ward, *The Profit Motive*, New York, 1924; p. 28.
11. Sidney and Beatrice Webb, *A Constitution for the Socialist Commonwealth of Great Britain*, New York, 1920; pp. 338–40.
12. 'The making of profit decides whether labor has been wisely applied or material rightly used. Men will not pay for what they do not want, nor on the other hand continue to supply that by which they gain nothing. Thus we have in profit the final economic justification of expenditure in trade. Every transaction comes to be tried in the court of profit or loss, and no business enterprise, unless it be experimental or educational or philanthropic in its character, which does not respond to this guidance can be permanently either successful or useful.' (Charles Booth, *Life and Labor of the People in London*, second series, 'Industry,' New York, 1903; vol. 5, p. 77.)

Chapter XVIII

1. Senate Document No. 248, 65th Congress, 2d Session, *Profiteering*, Washington, 1918; p. 18.
2. The possibilities of curbing fluctuations in the general price-level,

and the impossibility of attaining absolute stability are discussed in *Money*, chap. x.

3. Report of the Federal Trade Commission regarding profiteering, June 29, 1918.
4. Horace Secrist, *Competition in the Retail Distribution of Clothing*, Bureau of Business Research, Northwestern University, Chicago, Series II, No. 8.

There is no monopoly, however, in good management. Some of the most prosperous firms of yesterday are making no profits today; and every year some of the managers who have established reputations find themselves unable to compete with men whose reputations are in the making.

Chapter XIX

1. Senator Magnus Johnson, Minnesota, introduced a bill amending Subsection D of Section 14 of the Federal Reserve Act, by substituting for it the following: 'Rate of discounts and rediscounts to be charged by Federal Reserve banks shall be two per cent per annum. No deviation from this rate shall be permitted except by authority of Congress.'
2. See footnote 1, Chapter XII.

Chapter XX

1. Figure 30 is based on a chart prepared by the American Telephone and Telegraph Company to show fluctuations in the state of business activity. Fluctuations in the volume of trade are less extreme, as Figures 55 and 57 show. Nevertheless, the economic losses to society due to the failure of consumption to keep pace with production are far greater than statistics of the volume of trade would seem to indicate, and not all the losses are economic. Undoubtedly Figure 30 does not make even the economic losses due to recurrent business setbacks appear as large as they are. See Figures 51 to 58.

The base line and the top line of Figure 30 are drawn so that the chart shows roughly, as explained in the text, the relation between the actual achievement of industry and the achievement which would have been possible had maximum prosperity been maintained.

See, also, J. A. Hobson, *Economics of Unemployment*, London, 1922; pp. 23–25.

The close correspondence between volume of employment and volume of production has been shown by William A. Berridge, in *Cycles of Unemployment in the United States, 1903–1922*, Pollak Publication, Number 4, Boston, 1923.

2. See P. W. Martin, *The Flaw in the Price System*, London, 1924;

p. 11. Also Dennis H. Robertson, *A Study of Industrial Fluctuation*, London, 1915; p. 1.
3. *Manufacturers' Record*, Baltimore, April 5, 1923.
4. *Money*, Pollak Publication, Number 2; pp. 214–17.

Chapter XXI

1. There is further discussion of this matter in *Money*, Pollak Publication, Number 2, pp. 277–83, and in F. Lavington, *The Trade Cycle*, London, 1922; p. 30.
2. There is further discussion of the 'buyers' strike' in *Money;* pp. 292–97.

Chapter XXII

1. See J. A. Hobson, *Economics of Unemployment*, London, 1922, chap. 1, where further evidence of a limited market is presented.
2. Herbert Hoover, *The New Republic*, December 29, 1920.
3. Carter Glass, in the United States Senate, January 16, 1922.
4. *Annalist*, New York, February 16, 1925; p. 249.
5. Edward A. Filene, *The Way Out*, Garden City, 1924; p. 70.
6. *Trade Winds*, Union Trust Company, Cleveland, July, 1924.

Chapter XXIII

1. Oswald St. Clair, *The Physiology of Credit and of Money*, London, 1921; p. 72.
2. For comments on this error, see *Money*, pp. 7–10.
3. For arguments adduced to prove that a deficiency in consumer purchasing power is the chief cause of business depressions, see J. R. Bellerby, *Economic Journal*, September, 1923; P. W. Martin, *The Flaw in the Price System*, London, 1924; C. H. Douglas, *Economic Democracy*, New York, 1920; C. Marshall Hattersley, *The Community's Credit*, London, 1922; H. Abbati, *The Unclaimed Wealth*, New York, 1924.
4. See the paper by Hudson B. Hastings, on 'The Circuit Velocity of Money,' in the *American Economic Review*, June, 1923; and the paper by William Trufant Foster, on 'The Circuit Flow of Money,' in the *American Economic Review*, March, 1923.
5. See *Money*, pp. 303–20; also, M. C. Rorty, *Notes on Production*, Publication of the American Telephone and Telegraph Company; also, M. C. Rorty, *Some Problems in Current Economics*, New York, 1922; p. 63.
6. The diagram is based on the figures for 1909–18, found in the admirable study of *Income in the United States*, published in 1921 by the National Bureau of Economic Research, New York. Since

1918, a smaller proportion of the national income has been income from property.

7. The chief significance of the fact that only a part of consumers' income is spent for consumers' goods is discussed in Chapter XXV.

Chapter XXIV

1. From the speech of the R. McKenna, Chairman of the London Joint City and Midland Bank, at the Ordinary General Meeting, January 27, 1922.

   See Oswald W. Knauth, 'The Place of Corporate Surplus in the National Income,' in the *Journal of the American Statistical Association*, June, 1922.

2. See Dennis H. Robertson, *A Study of Industrial Fluctuation*, London, 1915; p. 1.
3. This subject is ably discussed by Frank H. Knight in *Risk, Uncertainty, and Profit*, Boston, 1921; chap. I.
4. Other hypothetical cases that suggest some of the same conclusions that we reach are found in Hudson B. Hastings, *Costs and Profits*, Pollak Publication, Number 3; P. W. Martin, *The Flaw in the Price System*, London, 1924.
5. See above, p. 142.
6. See J. A. Hobson, *Economics of Unemployment*, London, 1922; chap. II.

   This is an important treatise because it focuses attention upon inadequate consumer income as the chief cause of business depressions. In our view, however, Mr. Hobson neither discovers the cause of the trouble nor offers remedies that would go very far toward effecting a cure. In particular we question whether he has distinguished sharply enough between the 'over-saving' of capital equipment as a cause of business depressions, and the uses which are made of the 'over-savings.'

7. 'Overbuilt industries' may now have a depressing influence on business, because they may give rise to competitive conditions which reduce profits and discourage forward buying in those industries. But the overbuilding of industry *in general* would be impossible if consumer purchasing power was sufficient, after providing for individual savings, to buy the total output of consumers' goods.

Chapter XXV

1. R. G. Hawtrey, in a review of *Money*, in the *American Economic Review*, March, 1924.
2. *Money*, pp. 220–21.
3. *Annual Report of the Comptroller of the Currency*, Washington, December 1, 1924; p. 101.

4. Harry Hubbard, 'Great Fortunes as a Benefit to All,' *New York Times*, September 18, 1921.
5. See C. F. Bickerdike, 'Individual and Social Interests in Relation to Saving,' *Economic Journal*, September, 1924; pp. 408–22. See, also, Virgil Jordan, 'Is the United States saving Too Much?' *Baltic-Scandinavian Trade Review*, Copenhagen, May 20, 1925; and the *New Age*, London, June 4, 1925.

   N. Johannsen, in a pamphlet on *Business Depressions* (Stapleton, New York, 1925), says that depressions are caused by 'impair savings' and 'impair investments,' by which he appears to mean investments in property already in existence, or in loans. 'Overproduction,' he says, 'if confined to consumptibles, seldom amounts to much; it becomes serious when extending to factories *and means of production*.' This theory is directly contrary to the theory advanced in *Profits*. See pages 277, 286.

   See Edgar J. Rich, *A Fundamental Principle of Political Economy*, Hyde Park, 1892. This pamphlet of 14 pages, which came to our notice after *Profits* was in type, is an interesting attempt to expound this proposition: 'A cause of industrial depression is too rigid economy on the part of the individuals of a community — an economy which is induced by a desire to purchase interest-yielding investments.'

Chapter XXVI

1. See Chapters XI and XII, above.
2. Reginald McKenna, Address to the Shareholders of the L. J. C. and M. Bank, January 28, 1921.
3. See Chapters II and XIX, above.

Chapter XXVII

1. We have discussed the annual equation in Chapter XXIII, above; at greater length in the *Annalist* (New York, October 30, 1922); and at still greater length in *Money*, chap. XIX.
2. The time element in production is the subject of chap. XVI of *Money*.
3. No one who is acquainted with what actually goes on in banking and in business, when the volume of production is increasing, need be reminded that the real world is in all essentials identical with our hypothetical Case X.
4. Jacob Viner, *Journal of the American Statistical Association*, June, 1924; p. 263.
5. P. W. Martin, *The Flaw in the Price System*, London, 1924; p. 83.
6. F. O. Watts, President of the First National Bank in St. Louis, and Chairman of the American Financial Delegation to the Interna-

tional Chamber of Commerce meeting at London, June, 1921. *Commercial and Financial Chronicle*, October 29, 1921; p. 93.

7. Bilgram and Levy, *The Cause of Business Depressions*, Philadelphia, 1914; p. 53.

   This traditional teaching is discussed in chap. XII of *Money*.

8. Further references are needless. The idea pervades economic writings that supply and demand are the same thing looked at from different standpoints and must be equal; that the production of goods creates the demand for goods. The error is due directly to the insistence that modern trade is merely refined barter and to the consequent overlooking of the changes introduced when demand is expressed, not in goods, but in money.
9. This subject is considered at greater length in *Money*, chap. XII.
10. Oswald St. Clair, *Physiology of Credit and of Money*, London, 1921; p. 106.
11. W. P. G. Harding, Address at Charlotte, North Carolina, September 22, 1921.
12. Percy and Albert Wallis, *Prices and Wages*, London, 1921; pp. 393, 396.
13. J. A. Hobson, *The Economics of Unemployment*, London, 1922; p. 69.

    Compare J. A. Hobson, in the Introduction to *The Unclaimed Wealth*, New York, 1924; p. 11: 'If everybody "spent" all the money he received, either in buying consumable goods or in buying capital goods (plant, materials, etc.), there could be no failure of effective demand.'

    The total output can always be sold *at a price*. Consumers always have money enough to buy not only all the goods there are, but all that could possibly be produced, if prices are sufficiently lowered. This is so obvious that it seems unnecessary, every time mention is made of the sufficiency or insufficiency of consumer income to buy the output of industry, to add the qualification 'without a fall in the price-level.'
14. This subject is considered at greater length in *Money*, chap. X.
15. F. W. Pethick Lawrence, *Unemployment*, London, 1921; p. 53.
16. *Money*, p. 249.
17. See chart of the rate of turnover of bank deposits, *Monthly Review*, Federal Reserve Bank of New York, March 1, 1925; p. 3.

Chapter XXVIII

1. See Table 25, Appendix.
2. Sound reasoning in favor of the adjustment of Government expenditures to fluctuations in business is found in *Business Cycles and Unemployment*, New York, 1923; pp. 231–61. See, also, A. L. Bowley and F. D. Stuart, 'Regularizing the Demand for

Labour by Postponing or Accelerating Works,' in *Is Unemployment Inevitable?* London, 1924; p. 366; and *The Third Winter of Unemployment*, London, 1923; p. 51. A bibliography on this subject has been issued by the Library of Congress.

3. *Manufacturers' Record*, Baltimore, April 5, 1923.
4. See *The Review of Economic Statistics*, Harvard Committee on Economic Research, especially 'Review of the Year 1923.'

   See, also, William Trufant Foster and Waddill Catchings, 'Business Conditions and Currency Control,' in *Harvard Business Review*, April, 1924; pp. 269–82.
5. 'In 1923 and 1924 . . . funds were available to all solvent borrowers in ample volume and at low rates.' *Harvard Economic Service*, November 15, 1924.
6. *Commercial and Financial Chronicle*, vol. 118; pp. 362, 1462; *Journal of Commerce*, January 2, 1924.

   For further discussion of this question, see *Proceedings of the Academy of Political Science*, New York, May, 1924: papers by Meyer Jacobstein, p. 56, and William Trufant Foster, p. 39.
7. Statements to this effect by numerous economists are found in the *Hearings* of the 67th Congress, 4th Session, on H. J. Res. 314, February, 1923.

   See, also, Andrew W. Mellon, 'Taxation,' in *The People's Business*, New York, 1924; chap. v.

   We are not here considering the advisability of high taxes or tax-exempt securities; nor are we questioning the statement that taxes have caused the volume of production of private industry, in some years, to be less than otherwise it would have been. The question we are raising is how consumers could have obtained enough money in 1918, 1919, and 1920, for example, to buy a *larger* output, when they did not obtain enough to buy the actual output.
8. Edwin R. A. Seligman, *Hearings* of the 67th Congress, 4th Session, on H. J. Res. 314, February, 1923; p. 15.
9. Andrew W. Mellon, *Independent*, March 29, 1924.
10. Otto H. Kahn, *Why I Favor the Mellon Plan*, New York, 1924; p. 6.
11. Pierre DuPont, *Literary Digest*, December 8, 1923.
12. Ogden L. Mills, *Proceedings of the Academy of Political Science*, New York, May, 1924; p. 62.

    See, also, *Proceedings of Investment Bankers' Association of America*, 1922; p. 91.

Chapter XXIX

1. Hudson B. Hastings, *Costs and Profits*, Pollak Publication, Number 3; Boston, 1923; chap. x.

2. See the sections in *Money*, chap. IX, on 'A Favorable Balance of Trade' and 'The Surplus Production Fallacy.'
3. See H. T. Warshow, 'Distribution of Corporate Ownership,' *Quarterly Journal of Economics*, November, 1924. He finds that the number of shareholders in 68 companies was 342,346 in 1900 and 1,786,214 in 1923, an increase of 500 per cent.

   See, also, S. S. Huebner, 'Stockholding in American Railroads,' *Annals of the American Academy of Political and Social Science*, December, 1923. He estimates the number of owners of stocks of railroads in the United States as about 4,400,000 in 1900 and 14,400,000 in 1922.

   From 1916 to 1919 some progress was made toward more equitable distribution of the income. During those years, according to the National Bureau of Economic Research, the proportion of the national income which was received by the highest 5 per cent of income receivers, fell off rapidly. In 1916, it was 34 per cent; in 1917, 29 per cent; in 1918, 25 per cent; and in 1919, only 24 per cent. After that, largely on account of the collapse of business and the fall in gross wages, the movement was unfortunately in the other direction.

   See, also, Robert S. Brookings, *Industrial Ownership;* New York, 1925.
4. J. A. Hobson, *The Economics of Unemployment*, London, 1922; p. 119.
5. J. A. Hobson, *The Economics of Unemployment*, London, 1922; p. 148.
6. *Ibid.*, p. 42.
7. C. H. Douglas, *Social Credit*, London, 1924; p. 211.

   Mr. Douglas contends, however, that his plan for supplying adequate consumer demand would not cause inflation. See *Credit, Power, and Democracy*, London, 1920; pp. 206 ff. See, also, Arthur E. Powell, *The Deadlock of Finance*, London, 1924; pp. 201 ff.
8. H. Abbati, *The Unclaimed Wealth*, New York, 1924; p. 185.
9. *Money*, chap. X, deals with 'The Quantity Theory of Money.'
10. *Money*, chap. V, deals with the deleterious effects of inflation and deflation.
11. 'It may be asked,' says W. A. Paton, 'if the sequence and character of events at the time of a business crisis do not demonstrate that obstructions in the flow of purchasing power to the ultimate buyer cannot be major causes. Is it not true that retail buying is commonly increasing rapidly when the peak is reached in productive industry and continues to increase for some time thereafter?' *American Economic Review*, June, 1924; p. 320.

Any one who has followed our mathematical demonstrations will see at once that these objections miss the point, for increases in the dollar demand of ultimate buyers are not enough to prevent a fall in the price-level and consequent business losses. Once the upward movement of business is well under way the volume of money and the dollar demand of consumers *must increase at an accelerating rate.* Producers know from abundant experience that retail buying cannot long continue to increase at the necessary rate.

12. Alfred Marshall, *Money, Credit, and Commerce,* London, 1923; p. 261.
13. *Money,* chap. XVI.
14. *Ibid.,* chap. XIV.
15. See Chapter XIII, above.

Chapter XXX

1. Paul H. Douglas, *Real Wages,* Pollak Publication, Number 9, Boston, 1925.

   Weighted indexes of the relative money hourly wages in towns of the 1890–99 average were computed for each industry. The resulting index for each year was then divided by the index of the cost of living, and thus an index of real hourly wages was secured. These indexes for the various industries were then weighted by the relative numbers employed in each and a weighted average for the industries as a whole was thus secured.

   A full statement of the sources used and methods employed in constructing these indexes is given in *Real Wages.*

   See, also, Alvin H. Hansen, in *American Economic Review,* March, 1925; p. 27.
2. *Money,* p. 113. For indexes of production, see Edmund E. Day's study in the *Review of Economic Statistics,* Cambridge, July, 1922; and Walter W. Stewart's study in the *American Economic Review,* March, 1921; and the index of the Federal Reserve Bank of New York. For a chart showing the growth of population, see Figure 6 of *Money.*
3. See the quotations on page 243 above.
4. *Business Cycles and Unemployment,* New York, 1923; p. 96.

   See, also, *Employment, Hours, and Earnings in Prosperity and Depression,* National Bureau of Economic Research, New York, 1923; vol. 5; and the article by David Friday, in the *New Republic,* June 20, 1923.
5. *News-Bulletin* of the National Bureau of Economic Research, Inc., New York, August 1, 1923.
6. Willford I. King, *Employment, Hours, and Earnings in Prosperity*

and Depression, National Bureau of Economic Research, vol. 5, New York, 1923; p. 143.

7. See articles by Carl Snyder in the *Journal of the American Statistical Association:* 'A New Index of the Volume of Trade,' December, 1923, p. 949; 'A New Index of Business Activity,' March, 1924, p. 36; 'A New Clearings Index of Business for Fifty Years,' September, 1924, p. 329.

   Some of these series, including wholesale and retail trade, cover only the Second Federal Reserve District (the New York district); but the data that are now available from other districts indicate that the data for the Second District are fairly representative.

8. The index of the Federal Reserve Bank of New York, devised by Carl Snyder, is the best index of total volume of trade. The other indexes better serve some purposes, but they are too heavily weighted with productive activities to be good measures of general business activity. The index of the Federal Reserve Bank of New York is also used in Figures 40 and 43.

9. Unpublished thesis by Simon S. Kuznets, of Columbia University.

10. The index of general business conditions is the Harvard 'B' index, devised by Warren M. Persons, from debits to individual bank accounts outside New York City and wholesale prices. See 'The Revised Index of General Business Conditions,' *Review of Economic Statistics*, vol. v, July, 1923; p. 187. The index of the physical volume of trade is explained in the *Review of Economic Statistics*, vol. v, April, 1923, p. 71. The index is made up from the following items, weighted as indicated: pig-iron production (1), steel-ingot production (1), cotton consumption (1), railroad freight-car loadings (6), and employment (3). See note 8, above.

11. William A. Berridge, in *Purchasing Power of the Consumer*, Chicago and New York, 1925; pp. 61–62.

12. See *The Problem of Business Forecasting*, Pollak Publication, Number 6; p. 142.

13. William Trufant Foster and Waddill Catchings, 'Business Conditions and Currency Control,' *Harvard Business Review*, April, 1924; pp. 269–82. This article deals at greater length with the industrial ups and downs of the year 1923.

14. Harvard Economic Service, *Weekly Letter Number 8*, February 23, 1924.

15. Hudson B. Hastings, *Costs and Profits*, Pollak Publication, Number 3, Boston, 1923.

16. This contention is not accepted by economists generally. W. A. Patten, in the *American Economic Review*, June, 1924, pp. 318–19, expresses a common view when he says: 'It is indeed to be doubted if important causes of the cyclical trend of business are to be

found in the fiscal policies of business concerns. . . . In the first place, it must be urged that the business cycle can never be explained solely or even primarily in terms of derangements in the circulation of purchasing power. Whatever might be our monetary policies and habits, extraordinary political and economic developments, to say nothing of the seasonal and other ordinary irregularities in demand, would of course continue to cause major disturbances in business.

Chapter XXXI

1. Herbert Hoover, *The New Republic*, December 29, 1920.
2. See pages 274–78, and Chapter XXVIII, above.
3. As a matter of fact, the system does work much better than it could possibly work if some of the criticisms of it were justifiable. C. H. Douglas goes too far when he asserts that industry disburses so little money that 'the only effective demand of the consumer is a few per cent of the price value of commodities.' (See *Economic Democracy*, New York, 1920; p. 67.) Arthur Kitson also overstates the case when he declares that the purchasing power which is distributed in the process of producing commodities 'is insufficient to buy more than a small proportion of the goods.' (See *Unemployment*, London, 1921; p. 94.) According to this theory, it is impossible to sell all that is produced because so little of the money which enters into the costs, and which must therefore be included in retail prices, gets into the hands of consumers. This argument evidently proves too much. If it were true that consumers could buy only a small part of the output at prices sufficient to cover costs, industry would suffer far more than the setbacks which are pictured in Figure 30 (page 228). It would virtually cease to function. The fact that consumers do contrive in the long run to buy nearly all the goods that are offered for sale, at prices which induce the business world to produce at least enough, decade after decade, to prevent a decline in standards of living, discredits the conclusion that the only effective demand of consumers is but a few per cent of the price value of the output of industry.

   The Douglas theory is considered on pages 338–39 of *Money*.
4. Alfred Marshall, 'The Social Possibilities of Economic Chivalry,' *Economic Journal*, March, 1907; p. 7.

TABLE I, SECTION B. BUSINESS PROFITS IN UNITED STATES, 1921–1923[1]

(In thousands of dollars)

CAPITAL AND SURPLUS

	COMPANIES	1921	1922	1923
Automobiles	27	$817,943	$983,061	$1,084,030
Automobile accessories	31	299,213	345,516	410,509
Building material and real estate	43	694,958	754,137	837,724
Chemicals	21	862,307	896,755	946,048
Clothing	17	115,178	148,723	174,976
Coal	20	799,166	812,932	826,059
Copper and brass	34	1,409,539	1,445,387	1,727,981
Electrical equipment	10	594,358	619,151	676,848
Express, trucking, and warehouse	7	154,624	155,267	141,954
Farm implements	9	418,813	403,171	397,609
Fertilizer	5	218,966	213,924	200,469
Food products	52	1,795,768	1,964,266	2,094,710
Gold and silver	20	128,465	138,727	147,544
Household supplies	20	290,663	330,038	340,244
Lead, zinc, and nickel	10	141,386	149,176	151,804
Leather	4	134,254	135,571	126,644
Machinery	22	324,568	317,093	331,502
Office and business equipment	14	114,539	154,730	163,571
Oil	83	4,684,324	5,629,527	5,973,063
Paper	14	256,090	269,947	282,907
Printing and publishing	11	130,555	136,862	140,092
Railroad equipment	21	734,888	770,352	814,982
Retail trade	55	940,684	1,079,168	1,194,605
Shipping and shipbuilding	14	461,283	449,541	445,186
Shoes	5	181,791	201,133	212,256
Steel and iron	48	3,518,964	3,781,391	4,202,486
Sugar	23	469,329	580,920	632,038
Textiles — cotton goods	14	230,852	223,181	288,849
Textiles — woolen goods	4	140,042	133,307	163,676
Textiles — miscellaneous	4	32,758	39,991	42,126
Theaters	4	118,039	119,350	135,951
Tires and rubber goods	12	663,365	668,030	660,363
Tobacco	20	650,836	713,675	761,490
Miscellaneous	12	242,882	237,901	256,727
Entire industrial group	710	$22,771,408	$25,001,919	$26,987,040
Electric light, gas, water, etc.	120	4,752,327	5,892,422	6,888,121
Telephone and telegraph	13	2,072,530	2,283,864	2,538,124
Traction	25	1,379,608	1,616,702	1,602,969
Entire public utility group	158	8,204,466	9,792,990	11,029,215
Entire railroad group	73	18,844,092	19,554,195	20,123,901
Grand total: All three groups	941	$49,819,967	$54,349,105	$58,140,157

[1] Made from a study by the Standard Statistics Company of New York. For Section A of this table, see page 106.

TABLE I, SECTION B. (*continued*)

NET EARNINGS

	COMPANIES	1921	1922	1923
Automobiles	27	$[d] 51,267	$125,921	$168,876
Automobile accessories	31	13,715	50,809	64,360
Building material and real estate	43	26,610	66,288	100,317
Chemicals	21	34,558	65,286	89,462
Clothing	17	4,670	15,250	16,928
Coal	20	25,104	21,631	34,099
Copper and brass	34	[d] 38,363	11,763	58,656
Electrical equipment	10	39,474	54,655	67,589
Express, trucking, and warehouse	7	8,241	9,382	9,177
Farm implements	9	[d] 9,183	[d] 920	8,850
Fertilizer	5	[d] 23,540	3,522	3,318
Food products	52	28,387	155,745	196,393
Gold and silver	20	8,752	13,057	11,919
Household supplies	20	[d] 1,857	40,673	44,481
Lead, zinc, and nickel	10	[d] 1,385	6,189	9,212
Leather	4	[d] 14,278	4,719	[d] 5,132
Machinery	22	[d] 3,986	13,638	25,665
Office and business equipment	14	2,800	8,521	13,192
Oil	83	288,503	412,288	376,268
Paper	14	[d] 149	5,272	19,845
Printing and publishing	11	8,980	10,002	10,943
Railroad equipment	21	36,883	43,673	87,156
Retail trade	55	15,330	109,262	146,323
Shipping and shipbuilding	14	17,793	16,415	10,249
Shoes	5	9,870	22,402	22,946
Steel and iron	48	70,385	116,535	273,796
Sugar	23	[d] 50,644	19,537	60,737
Textiles — cotton goods	14	8,792	5,001	15,277
Textiles — woolen goods	4	4,185	7,165	9,225
Textiles — miscellaneous	4	452	3,436	3,775
Theaters	4	8,127	7,802	9,667
Tires and rubber goods	12	[d] 23,376	46,908	41,842
Tobacco	20	65,349	77,760	79,062
Miscellaneous	12	20,512	31,720	34,377
Entire industrial group	710	$469,450	$1,601,322	$2,118,965
Electric light, gas, water, etc.	120	272,699	397,158	490,616
Telephone and telegraph	13	139,988	167,701	180,682
Traction	25	56,513	75,660	81,511
Entire public utility group	158	469,202	640,521	752,810
Entire railroad group	73	799,381	823,665	1,010,040
Grand total: All three groups	941	$1,738,033	$3,065,508	$3,881,275

d = deficit.

Table 3. Net Profits of Corporations [1]

(In hundreds of thousands of dollars)

	Grand Total	Industrials					Utilities		
		Total	Iron and Steel	Motors and Accessories	Oil	Miscellaneous Industries	Total	Telephone	Other Utilities
Number of concerns	164	36	8	4	7	17	128	72	56
1920									
1st quarter	973	578	306	69	105	98	395	226	169
2d quarter	985	636	376	56	116	88	349	199	150
3d quarter	1046	735	464	44	133	94	311	180	131
4th quarter	580	218	327	10	63	−182	362	212	150
1921									
1st quarter	674	277	157	17	84	19	397	249	148
2d quarter	581	150	44	40	79	−13	431	294	137
3d quarter	548	157	16	17	62	62	391	258	133
4th quarter	584	140	8	−1	90	43	444	266	178
1922									
1st quarter	715	241	36	48	87	70	474	299	175
2d quarter	949	455	117	98	135	105	494	320	174
3d quarter	911	436	152	70	102	112	475	306	169
4th quarter	913	383	117	58	89	119	530	332	198
1923									
1st quarter	1167	572	225	96	129	122	595	361	234
2d quarter	1360	795	413	120	133	129	565	354	211
3d quarter	1126	635	381	83	115	56	491	298	193
4th quarter	1045	477	403	16	32	26	568	350	218

[1] In this table, the Reports Department of the Federal Reserve Bank of New York includes all companies which have published quarterly statements of profits since 1920, as compiled by the *Commercial and Financial Chronicle*. Some industries — for example, the iron and steel industry — are more adequately represented than others.

TABLE 3. NET PROFITS OF CORPORATIONS [1] (*continued*)

(In millions of dollars)

GROUP	No. OF CORPORATIONS	1917	1918	1919	1920	1921	1922	1923	1924
Steel and railroad equipment	16	310	198	130	162	55	61	175	123
Oils	9	17	13	17	18	16	17	12	13
Food and food products	12	65	53	57	55	26	65	75	75
Clothing (inc. leather & textiles)	11	52	41	59	6	12	39	35	17
Tobacco	7	29	28	30	33	40	49	49	56
Miscellaneous industrials	37	133	108	78	75	30	68	93	95
Stores	10	41	37	56	25	d7	48	65	68
Total seven groups	102	647	478	427	374	172	347	504	447
Telephone	70	76	72	77	82	107	126	136	150
Other public utilities	27	49	41	43	45	46	71	84	96
Total public utilities	97	125	113	120	127	153	197	220	246
Total nine groups	199	772	591	547	501	325	544	724	693
Class I railroads	192	934	639	516	58	616	777	984	987

[1] *Monthly Review*, Federal Reserve Bank of New York; March, 1925.
d = Deficit.

TABLE 4. NET PROFITS OF INDUSTRIALS IN ENGLAND [1]

QUARTER	QUARTERLY INCREASES AND DECREASES IN NET PROFITS						
	1918 Per cent	1919 Per cent	1920 Per cent	1921 Per cent	1922 Per cent	1923 Per cent	1924 Per cent
First	− 1.0	+10.4	+26.9	+ 3.5	−43.4	+41.4	+ 8.7
Second	− 5.8	− 5.1	+37.8	− 8.4	−33.7	+22.1	+ 3.0
Third	+12.3	− 3.4	+41.9	−42.4	−23.5	+65.2	+ 2.3
Fourth	+ 4.7	+10.5	+27.1	−52.9	+ 3.9	+11.4	+13.3

[1] *London Economist.*

TABLE 5. AVERAGE RATE OF PROFIT EARNED ON CAPITAL STOCK [1]

	1914	1915	1916	1917	1918
Farm and household supplies					
Agricultural implements	6.7	8.6	9.3	12.4	9.8
Baking	7.7	6.2	6.7	8.3	8.5
Boots and shoes	1.1	8.2	14.7	19.6	17.7
Canning	4.5	9.9	13.2	32.2	14.9
Coal — anthracite	18.6	17.2	18.3	22.9	16.9
Cotton goods	11.7	8.0	13.3	17.9	20.5
Fertilizers	10.8	5.7	9.9	8.4	13.4
Flour mills	20.8	13.8	13.1	26.8	16.5
General merchandising	5.1	12.3	16.1	14.8	13.0
Petroleum	9.6	18.6	35.4	30.4	22.3
Printing and publishing	4.1	4.4	5.6	5.1	4.5
Silk	11.8	12.9	17.2	20.4	18.4
Slaughtering and meat-packing	16.0	21.9	23.6	32.5	16.8
Sugar	6.4	10.2	19.1	14.4	10.7
Tobacco	11.8	13.2	15.3	13.3	16.6
Woolen and worsted	5.4	7.6	10.1	18.7	10.2
Ice	2.9	3.0	4.0	5.6	6.3
Musical instruments	6.9	8.5	11.6	6.6	17.6
Total	9.5	12.8	19.7	20.1	15.0
Industrial material and equipment					
Acids, chemicals, etc.	9.1	12.6	20.1	16.5	16.7
Automobiles	8.8	18.7	20.9	14.4	11.7
Clay products	3.4	3.5	8.6	15.8	13.5
Coke (by-product)	14.4	13.3	81.9	44.5	17.9
Electrical appliances	8.4	9.9	16.7	21.5	16.3
Explosives	10.8	45.0	70.5	37.8	32.6
Glass	6.1	6.2	19.1	22.3	15.9
Iron and steel	2.8	9.6	33.9	27.5	16.1
Leather	5.5	8.0	18.0	16.6	10.1
Lumber	1.1	0.9	7.5	11.0	3.2
Miscellaneous machinery	5.9	11.1	22.7	13.5	13.9
Mining — copper	11.6	19.4	38.0	36.0	19.4
Mining — lead	6.8	15.3	22.4	19.5	16.8
Paper and wood pulp	2.1	1.7	10.7	11.9	9.0
Railway equipment	6.3	6.1	13.5	13.8	15.4
Rubber tires	9.9	14.0	14.6	19.0	21.8
Shipbuilding	3.0	5.1	8.7	22.6	30.9
Total	5.8	12.1	27.5	23.3	16.9

[1] Basil M. Manly, 'Profits and the Cost of Living.' *Annals of the American Academy*, May, 1920, p. 157.

TABLE 7. RATE OF PROFIT OF VARIOUS STEEL AND EQUIPMENT CONCERNS [1]

PERIOD	U.S. Steel	Sloss Sheffield	Lackawanna Steel	Crucible Steel	Bethlehem Steel	Republic Iron and Steel	Railway Steel and Spring	Pressed Steel Car	American Locomotive	New York Air Brake	Westinghouse Air Brake
Pre-War period	6.8	3.0	4.3	5.6	7.1	4.3	4.6	4.4	5.7	5.4	17.3
Total War period	12.2	6.5	14.9	15.7	32.5	12.8	8.6	6.0	8.8	23.4	24.4
U.S. neutral period	11.3	4.8	10.2	14.9	41.7	10.7	5.8	4.9	8.9	31.3	21.2
U.S. belligerent period	13.5	9.1	22.0	18.1	18.7	16.0	12.9	8.6	8.5	11.5	34.1
					RELATIVES						
Pre-War period	100	100	100	100	100	100	100	100	100	100	100
Total War period	179	216	346	280	457	297	187	136	154	433	141
U.S. neutral period	166	160	237	266	587	249	126	111	156	580	123
U.S. belligerent period	198	303	511	323	263	372	280	195	149	213	197

[1] Bruce D. Mudgett, in *Annals of the American Academy*, May, 1920.

TABLE 8. PROFITS, DIVIDENDS AND SURPLUS OF NATIONAL BANKS [1]

(In millions of dollars)

YEAR ENDED JUNE 30	NUMBER OF BANKS	CAPITAL	SURPLUS	DIVIDENDS	NET ADDITION TO PROFITS	PERCENTAGES		
						Dividends to capital	Dividends to capital and surplus	Net addition to profits, to capital and surplus
1914.....	7453	$1,063	$714	$120	$149	11.37	6.80	8.39
1915.....	7560	1,068	726	113	127	10.63	6.33	7.08
1916.....	7571	1,066	731	114	157	10.76	6.38	8.76
1917.....	7589	1,081	765	125	194	11.61	6.79	10.52
1918.....	7691	1,098	816	129	212	11.82	6.78	11.09
1919.....	7762	1,115	869	135	240	12.15	6.83	12.11
1920.....	8019	1,221	984	147	282	12.10	6.70	12.78
1921.....	8147	1,273	1,026	158	216	12.42	6.88	9.40
1922.....	8246	1,307	1,049	165	183	12.69	7.04	7.79
1923.....	8238	1,328	1,070	179	203	13.48	7.47	8.48
1924.....	8085	1,334	1,080	163	195	12.27	6.78	8.11

[1] Compiled from *Reports of the Comptroller of the Currency.* (Not complete.)

TABLE 10. PROFITS OF UNITED STATES STEEL CORPORATION [1]
(In thousands of dollars)

YEAR	NET PROFITS AVAILABLE FOR DIVIDENDS	SURPLUS BEFORE DIVIDENDS [a]	DIVIDENDS ON U.S. STEEL CORP. STOCK	BALANCE OF UNDIVIDED SURPLUS [b]
1901 [c]	$60,600	$85,600	$41,979	$43,620
1902	90,306	133,927	56,052	77,874
1903	68,462	135,965	43,111	55,724
1904	31,450	87,175	25,219	52,247
1905	68,684	120,932	25,219	69,313
1906	98,219	167,532	35,385	79,556
1907	105,247	184,803	35,385	94,736
1908	45,634	140,371	35,385	105,079
1909	78,525	183,604	45,551	120,401
1910	87,490	207,891	50,634	130,438
1911	55,218	185,657	50,634	133,691
1912	54,257	187,948	50,634	136,716
1913	82,004	218,720	50,634	151,798
1914	23,371	175,170	40,468	135,204
1915	75,068	210,272	31,573	180,025
1916	271,406	451,432	69,696	381,360
1917	222,618	603,979	116,714	431,660
1918	136,902	568,563	96,382	466,888
1919	76,600	1,980,343	50,634	493,048
1920	109,061	2,166,797	50,634	523,454
1921	35,530	2,121,692	50,634	508,926
1922	38,733	2,049,928	50,634	499,139
1923	108,471	2,139,096	54,447	512,751

[a] Includes capital surplus of $25,000,000, provided at date of organization.
[b] After deduction of dividends and appropriations to cover capital expenditures, for special funds and sundry credits and charges; and exclusive (after December 31, 1902) of inter-company profits in inventories. Includes only surplus received or earned on or subsequent to April 1, 1901.
[c] Nine months only.

SUMMARY: April 1, 1901 to December 31, 1923

Capital surplus provided at date of organization		$25,000
Aggregate net profits as above	$2,023,868	
Less deductions	27,970	1,995,898
Balance of profits		$2,020,898
Dividends paid on U.S. Steel Corporation Stock, viz.:		
Preferred, 159¼ per cent	597,270	
Common, 110¼ per cent	560,382	1,157,652
Surplus		$863,246
Of the foregoing surplus there has been appropriated for payment of capital expenditures and special charges		350,495
Leaving balance of undivided surplus December 31, 1923		$512,751

[1] United States Steel Corporation, *Annual Reports*.

TABLE 11. CAPITAL, SURPLUS, EARNINGS, AND DIVIDENDS OF SWIFT AND COMPANY
(In thousands of dollars)

FISCAL YEARS	STOCKHOLDERS' INVESTMENT	SALES	EARNINGS	DIVIDENDS PAID	PERCENTAGE OF EARNINGS		
					On capital stock	On investment	On sales
1896.....	$14,004	$104,000	$990	$619	7.1	7.0	.9
1897.....	14,376	121,500	976	826	7.0	6.7	.8
1898.....	14,527	150,000	1,199	882	8.6	8.2	.8
1899.....	16,077	160,000	2,085	1,236	13.9	12.9	1.3
1900.....	21,926	170,000	2,190	1,671	10.9	9.9	1.2
1901.....	22,446	200,000	2,689	1,389	13.4	11.9	1.3
1902.....	23,746	200,000	2,812	1,312	14.0	11.8	1.4
1903.....	30,246	200,000	3,000	1,750	12.0	11.8	1.5
1904.....	31,496	200,000	4,025	2,275	16.0	12.7	2.0
1905.....	43,246	200,000	4,200	2,450	12.0	9.7	2.1
1906.....	44,996	200,000	5,737	3,237	16.3	12.7	2.8
1907.....	62,496	200,000	6,203	3,500	12.4	9.9	3.1
1908.....	65,200	240,000	6,300	3,500	12.6	9.6	2.6
1909.....	68,000	250,000	8,025	4,025	16.0	11.8	3.2
1910.....	82,000	250,000	7,050	4,200	11.7	8.6	2.8
1911.....	84,850	275,000	6,137	4,987	10.2	7.2	2.2
1912.....	101,000	300,000	8,250	5,250	11.0	8.1	2.7
1913.....	104,000	400,000	9,250	5,250	12.3	8.8	2.3
1914.....	108,000	425,000	9,450	5,250	12.6	8.7	2.2
1915.....	112,200	500,000	14,087	5,437	18.7	12.5	2.8
1916.....	120,850	575,000	20,465	6,000	27.2	16.9	3.5
1917.....	135,315	875,000	34,650	10,000	46.2	25.6	3.9
1918.....	159,965	1,200,000	21,157	9,000	21.1	13.2	1.7
1919.....	198,885	1,200,000	13,870	10,063	12.1	5.9	1.1
1920.....	238,381	1,100,000	5,170	12,000	3.4	2.1	0.4
1921.....	231,552	800,000	([a] 7,812)	12,000	([a] 5.2)	([a] 3.3)	([a] 0.9)
1922.....	211,739	650,000	13,049	12,000	8.7	6.1	2.0
1923.....	212,789	750,000	13,184	12,000	8.7	6.8	1.7

[a] Loss.

TABLE 12. NET PROFITS OF 419 COMPANIES IN ENGLAND[1]

(After payment of interest, etc.)

INDUSTRY	Number of Companies	REPORTS PUBLISHED IN QUARTER ENDED MARCH 31		INCREASE		DECREASE	
		1923 £	1924 £	£	%	£	%
Breweries	16	1,225,974	1,263,228	37,254	3.0	..	..
Electric light and power	30	2,786,612	3,446,814	660,202	23.8	..	..
Gas	33	3,242,628	2,863,553	..	..	379,075	11.7
Hotels, restaurants, etc.	8	266,128	289,962	23,834	9.0	..	..
Iron, coal and steel	30	2,266,376	2,511,399	245,023	10.8	..	..
Land, mortgage, etc.	18	849,643	896,478	46,835	5.5	..	..
Motor and cycle	6	(Dr.) 236,381	175,723	412,104	..	..	..
Rubber	35	244,748	385,410	140,662	57.3	..	..
Shipping	5	342,883	271,780	..	..	71,103	20.8
Shops and stores	31	2,861,348	3,372,330	510,982	17.5	..	..
Tea	4	58,316	84,659	26,343	45.2	..	..
Textile	18	4,365,052	4,689,268	324,216	7.4	..	..
Tramways	11	505,526	525,307	19,781	3.9	..	..
Trust	33	1,859,141	2,131,194	272,053	14.7	..	..
Water	12	470,552	477,182	6,630	1.4	..	..
Miscellaneous	129	16,046,502	16,998,614	952,112	5.9	..	..
	419	37,155,048	40,382,901	3,227,853	8.7		

[1] *London Economist*, April 19, 1924; p. 819.

TABLE 13. NET PROFITS OF 1358 COMPANIES IN ENGLAND [1]
(Increase or Decrease of 1923 over 1922, after payment of interest, etc.)

	Number of Companies	Increase		Decrease	
		£	%	£	%
Breweries	89	883,023	11.8	..	..
Canals, docks, etc.	5	189,881	68.6	..	..
Electric lighting, etc.	35	938,579	45.5	..	..
Gas	48	1,426,085	65.7	..	..
Hotels, restaurants, etc.	29	313,186	25.9	..	..
Iron, coal, and steel	101	..	..	3,262,873	24.5
Land, mortgage, etc.	72	1,120,021	40.9	..	..
Motor and cycle	27	1,302,786	..	..	..
Nitrate	20	..	..	332,917	55.0
Oil	12	..	..	2,616,222	16.9
Rubber, etc.	259	1,179,022	249.1	..	..
Shipping	25	..	..	285,236	5.1
Shops and stores	53	657,062	12.7	..	..
Tea	69	1,565,850	103.9	..	..
Telegraph, etc.	20	731,932	20.2	..	..
Textiles	42	7,352,107	152.7	..	..
Tramways	27	267,297	18.4	..	..
Trust companies	74	399,229	10.9	..	..
Waterworks	24	204,081	46.0	..	..
Miscellaneous	327	4,009,475	13.7	..	..
	1,358	16,042,368	16.1		

[1] *London Economist*, July 14, 1923, p. 46. Reports published in year ending June 30.

TABLE 14. PROFIT, SURPLUS, AND DIVIDENDS OF CORPORATIONS REPORTING NET TAXABLE INCOME OF $2000 AND OVER IN 1922

(In thousands of dollars)

DISTRIBUTION	NUMBER OF RETURNS	NET TAXABLE INCOME (gross income less deductions as defined in Revenue Act)	CASH DIVIDENDS PAID DURING THE YEAR	SURPLUS AND UNDIVIDED PROFITS AT CLOSE OF THE YEAR
Returns showing schedules completely filled out:				
1. Corporations reporting both net taxable income and net book profit for the year and paying cash dividends — Per cent of cash dividends to net book profit —				
Less than 10 per cent	1,867	$247,802	$14,350	$623,557
10 and less than 20	3,357	415,339	65,364	1,111,162
20 and less than 30	4,357	563,451	147,488	1,593,232
30 and less than 40	4,732	580,131	202,788	1,447,099
40 and less than 50	4,746	508,780	226,579	1,619,375
50 and less than 60	4,640	408,017	250,665	1,513,580
60 and less than 70	3,937	519,291	270,340	1,783,223
70 and less than 80	3,491	250,173	189,242	1,076,737
80 and less than 90	3,211	265,708	275,202	1,123,743
90 per cent or more	14,537	709 963	1,121,045	3,218,729
Total	48,875	4,468,660	2,763,068	15,110,440
2. Corporations reporting both net taxable income and book profit but not paying cash dividends	30,048	896,254	..	3,954,966
Total (1 and 2)	78,923	5,364,914	2,763,068	19,065,406
3. Corporations reporting net taxable income, although book loss, but paying cash dividends	332	16,396	18,796	98,082
4. Corporations reporting net taxable income, although book loss, and not paying cash dividends	370	7,963	..	123,257
Total (3 and 4)	702	24,359	18,796	221,339
Total returns showing schedules completely filled out	79,625	5,389,274	2,781,865	19,286,746

This table is the grand summary of all industries, as presented in Senate Document No. 85, 68th Congress, First Session, which is a letter from the Secretary of the Treasury, in response to a Senate Resolution of January 7, 1924. There were also 129,688 returns, with schedules incompletely filled out, reporting net taxable income of 6,586 million. For further statistics, by industries, see Table 15.

TABLE 15. PROFITS AND DIVIDENDS IN 1922 [1]

(In thousands of dollars)

INDUSTRY	NUMBER OF RETURNS	NET BOOK PROFIT	CASH DIVIDENDS	PER CENT DIVIDENDS ARE OF PROFIT
Agriculture and related industries	963	$48,687	$21,020	43.1
Mining and quarrying	2,018	207,210	139,673	67.4
All manufactures	22,800	2,836,729	1,276,241	44.9
Food products, beverages and tobacco	3,531	352,037	161,626	45.9
Textile and textile products	3,247	415,736	178,415	42.9
Leather and leather products	655	65,939	18,214	27.6
Rubber and rubber goods	136	30,575	7,920	25.4
Lumber and wood products	2,416	156,867	71,003	45.2
Paper, pulp and products	619	63,613	31,209	49.2
Printing and publishing	2,536	137,286	61,624	44.8
Chemicals and allied substances	1,352	440,711	230,758	52.3
Stone, clay and glass products	1,467	112,741	38,660	34.2
Metal manufactures and others	6,841	1,061,221	476,898	41.1
Construction	2,214	63,742	27,607	43.3
Transportation and other public utilities	4,042	800,867	579,981	72.4
Trade	22,506	739,625	259,615	35.1
Service	3,878	102,644	44,879	43.7
Finance	20,924	781,565	423,535	54.1
All others	280	17,013	9,309	54.7
Total	79,625	5,598,088	2,781,865	49.6
CERTAIN SUBDIVISIONS OF THE ABOVE GROUPS				
Coal-mining	1,066	105,378	54,946	52.1
Meat-packing, etc	225	31,885	16,673	52.2
Tobacco	130	81,076	43,606	53.7
Petroleum, etc	155	293,764	145,226	49.4
Motor vehicles, etc	200	227,204	43,967	19.4
Steam railways	175	270,377	196,185	72.5
Electric railways	104	21,755	11,904	54.7
Cab, livery, jitney bus, etc	169	5,023	2,139	42.5
Electric light and power	537	57,158	43,569	76.2
Gas companies	243	29,150	15,961	54.7
Telephone and telegraph	525	167,358	133,546	79.7
Department stores	653	86,988	26,242	30.1
Restaurants, etc	234	8,768	4,214	48.0
Hotels, etc	621	19,783	10,063	50.8
Laundries, etc	799	10,207	5,294	51.8
Theaters, etc	77	4,285	1,926	44.9
Motion-picture theaters	309	11,686	2,326	19.8
Physicians, etc	189	2,408	1,137	47.2
Lawyers, etc	189	4,864	2,433	50.0
National banks	4,020	203,586	120,207	59.0
State banks	5,548	84,981	47,910	58.7
Real estate, etc	2,087	38,094	17,889	46.9
All others	278	16,901	9,309	55.0

[1] This table is compiled from Senate Document No. 85 on *Distributed and Undistributed Earnings of Corporations*, Government Printing Office, Washington, D.C., 1924. See Table 14.

Table 16. Average Rates Paid on Securities of Industrials in England [1]

Quarter	On Debenture Capital				On Preference Capital				On Ordinary Capital			
	1920 (per cent)	1921 (per cent)	1922 (per cent)	1923 (per cent)	1920 (per cent)	1921 (per cent)	1922 (per cent)	1923 (per cent)	1920 (per cent)	1921 (per cent)	1922 (per cent)	1923 (per cent
1st	4 25	4.43	4.70	4.61	5.1	5.0	5.3	5.7	11.2	10.3	8.5	9.2
2d	4.40	4.61	5.00	5.08	5.0	5.6	5.0	5.4	13.7	12.6	8.8	9.9
3d	4.12	4.45	5.21	4.90	4.9	5.0	4.5	4.3	14.2	9.7	7.6	7.8
4th	4.43	4.52	4.83	5.03	5.3	5.1	5.6	5.4	11.6	7.6	8.6	9.6

[1] *London Economist*, January 12, 1924, p. 44.

Table 17. Income of the People of the United States [1]

(Unit for income: billions of dollars. Units for persons: thousands)

Year	Income of Persons Receiving under $2000		Income of Persons Receiving over $2000		Total Individual Income	Corporate Surplus	Total National Income
	Amount	Persons	Amount	Persons			
1910	$20.2	32,412	$9.8	1,411	$30.0	$1.2	$31.2
1911	20.6	32,973	9.6	1,379	30.2	0.9	31.1
1912	21.6	33,399	9.9	1,411	31.5	0.9	32.4
1913	22.3	33,635	10.2	1,443	32.5	1.0	33.5
1914	22.3	33,422	9.9	1,444	32.2	0.5	32.7
1915	22.9	32,907	11.4	2,008	34.3	1.6	35.9
1916	26.2	34,906	15.6	2,748	41.8	3.9	45.7
1917	29.8	34,520	20.9	4,213	50.7	3.4	54.1
1918	37.0	35,961	23.3	4,961	60.3	1.7	62.0
1919	39.5	33,913	25.3	5,608	64.8	2.0	66.8
1920	43.8	34,076				1.0	

National Income at Price-Level of 1913

Year	Total Income	Weighted Index Number of Prices	Income at Price Level of 1913
1910	$31.2	98.0	$31.8
1911	31.1	98.0	31.7
1912	32.4	99.1	32.7
1913	33.5	100.0	33.5
1914	32.7	100.6	32.5
1915	35.9	102.3	35.1
1916	45.7	113.7	40.2
1917	54.1	136.1	39.7
1918	62.0	160.7	38.6
1919	66.8	177.7	37.6

[1] National Bureau of Economic Research, *Income in the United States*, New York 1922; vol. 2, pp. 331, 337.

TABLE 18. DISTRIBUTION OF THE NATIONAL INCOME [1]

(In Percentages of Total Income)

	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919
PERSONAL INCOMES										
Tax exempt income	2.5	2.5	2.4	2.4	2.4	2.5	1.9	1.8	1.9	2.1
Over $2,000 except farmers	28.2	27.5	27.1	27.0	26.7	27.8	29.6	29.6	26.2	26.5
Under $2,000 except farmers	52.4	55.1	55.2	54.9	56.3	52.0	47.0	45.8	52.0	52.8
Farmers	52.8	11.8	12.3	12.6	12.9	13.0	12.7	16.3	17.0	16.5
Total	96.1	97.1	97.2	97.0	98.4	95.5	91.4	93.6	97.2	98.0
CORPORATE SURPLUS	3.8	2.8	2.7	3.0	1.5	4.4	8.5	6.3	2.7	1.9

[1] National Bureau of Economic Research, *Income in the United States*, New York, 1921; vol. 1, pp. 34–35.

TABLE 19. DISTRIBUTION OF PROFITS OF INDUSTRIALS IN ENGLAND[1]

QUARTER	Net Profits	Ordinary Dividend		Preference Dividend		To Reserve, etc.	
	£	£	%	£	%	£	%
1922							
First...	26,785,952	22,171,510	82.9	9,689,030	36.2	Dr. 5,074,588	19.1
Second..	25,195,690	20,066,774	79.7	6,156,048	24.4	Dr. 1,027,132	4.1
Third...	12,120,153	10,010,136	82.7	3,328,074	27.4	Dr. 1,218,057	10.1
Fourth..	24,228,719	15,698,160	64.9	4,720,052	19.4	3,810,507	15.7
	88,330,514	67,946,580	76.9	23,893,204	27.0	Dr. 3,509,270	3.9
1923							
First...	40,276,870	21,934,234	54.4	9,501,074	23.6	8,841,562	22.0
Second..	38,945,778	25,038,627	64.3	7,734,685	19.9	6,172,466	15.8
Third...	17,317,482	9,653,962	55.8	3,039,838	17.5	4,623,682	26.7
Fourth..	26,043,934	16,422,429	63.1	4,593,984	17.6	5,027,521	19.3
	122,584,064	73,049,252	59.5	24,869,581	20.3	24,665,231	20.2
Grand Total.....	210,914,578	140,995,832	68.2	52,762,785	23.6	21,155,961	12.0

[1] *London Economist*, January 13, 1923, p. 46; January 12, 1924, p. 43.

TABLE 20. SURPLUS OF ALL CORPORATIONS IN THE UNITED STATES REPORTING NET INCOME [1]

(000 omitted. Estimated by a process of sampling.)

YEAR	NET INCOME AFTER TAXES	DIVIDENDS PAID	SURPLUS REINVESTED
1909	$3,125,481	$2,125,481	$1,000,000
1910	3,360,251	2,290,251	1,070,000
1911	3,213,706	2,225,685	988,021
1912	3,832,151	2,498,149	1,334,002
1913	4,339,551	2,871,435	1,468,116
1914	3,710,600	2,411,900	1,298,700
1915	5,184,400	2,594,700	2,589,700
1916	8,594,095	3,783,900	4,810,195
1917	8,587,914	4,651,900	3,936,014
1918	[a] 6,300,000	4,250,000	2,050,000
1919	[a] 6,700,000	3,900,000	2,800,000

[1] David Friday, *Profits, Wages, and Prices*, New York, 1920; p. 64.
[a] Estimated.

TABLE 21. DISTRIBUTION OF VALUE ADDED BY MINING, MANUFACTURING, RAILROAD AND PUBLIC UTILITY CORPORATIONS [1]

YEAR	TOTAL VALUE ADDED (per cent)	WAGES (per cent)	TAXES (per cent)	INTEREST (per cent)	DIVIDENDS (per cent)	SURPLUS LESS DEFICIT (per cent)
1913	100	63.9	3.8	8.9	18.5	4.9
1916	100	56.6	4.0	6.0	14.3	19.1
1917	100	54.3	11.5	3.8	15.0	13.4
1918	100	61.0	13.7	5.4	11.7	8.2
1919	100	70.2	9.0	5.0	11.1	4.7

[1] David Friday, *Profits, Wages, and Prices*, New York, 1920; p. 124.

TABLE 24. SAVINGS DEPOSITS IN THE UNITED STATES, 1912–24 [1]

(In millions of dollars)

YEAR	TOTAL	PER CAPITA SAVINGS DEPOSITS	PER CAPITA TOTAL INDIVIDUAL DEPOSITS	INDEX GENERAL PRICE-LEVEL
1912	$8,425	$ 89	$175	99
1913	8,820	91	192	100
1914	8,728	89	193	101
1915	8,791	88	187	103
1916	9,478	94	218	116
1917	11,115	108	222	140
1918	11,589	111	236	164
1919	12,456	118	271	186
1920	14,672	137	306	213
1921	16,618	157	327	178
1922	17,331	158	338	170
1923	19,567	176	369	181
1924	20,873	186	366	181

CORRECTED FOR PURCHASING POWER OF THE DOLLAR (1913 = 100)

YEAR	TOTAL	PER CAPITA SAVINGS DEPOSITS	PER CAPITA TOTAL INDIVIDUAL DEPOSITS	INDEX OF TOTAL SAVINGS DEPOSITS
1912	$8,510	.0899	.1767	96
1913	8,820	.091	.192	100
1914	8,642	.0881	.1911	98
1915	8,535	.0854	.1815	97
1916	8,171	.0810	.1879	93
1917	7,940	.0771	.1585	90
1918	7,067	.0677	.1438	80
1919	6,697	.0634	.1457	76
1920	6,888	.0643	.1437	78
1921	9,336	.0882	.1837	106
1922	10,195	.0929	.1988	116
1923	10,811	.0972	.2039	122
1924	11,532	.1028	.2022	131

[1] Uncorrected data from *Savings Deposits and Depositors in Banks and Trust Companies of the United States for the years 1912 through 1924;* compiled and published by the American Bankers' Association, New York.

TABLE 25. RESOURCES OF 29,348 REPORTING BANKS IN THE UNITED STATES ON JUNE 30, 1924 [1]

(In thousands of dollars)

	ALL BANKS	SAVINGS BANKS
Loans and discounts (including rediscounts):		
On demand (secured by collateral other than real estate)	$2,582,634	$5,417
On demand (not secured by collateral)	948,430	..
On time (secured by collateral other than real estate)	3,120,839	12,273
On time (not secured by collateral)	7,215,563	17,367
Secured by farm land	283,577	544
Secured by other real estate	3,447,692	2,192,606
Not classified	13,828,982	1,547,539
Total	$31,427,717	$3,775,746
Overdrafts	56,334	..
Investments (including premiums on bonds):		
United States Government securities	$4,614,364	1,167,455
State, county, and municipal bonds	1,401,222	611,602
Railroad bonds	1,910,232	1,008,853
Bonds of other public service corporations	904,615	214,072
Other bonds, stocks, warrants, etc.	5,398,312	215,561
Total	$14,228,745	$3,217,543
Lawful reserve	2,468,808	..
Checks and other cash items	875,009	..
Cash on hand	911,500	40,297

[1] *Annual Report of the Comptroller of the Currency*, Washington, December 1, 1924; pp. 115, 582.

TABLE 26. INVESTMENTS OF 52 INSURANCE COMPANIES

(In millions of dollars)

	1917	1923
United States Government bonds	$62	$769
Canadian Government bonds		214
Other foreign government bonds	248	61
State, county, and municipal bonds	233	329
Railroad stocks and bonds	1,759	1,972
Other stocks and bonds	185	367
Farm mortgage loans	730	1,662
Other mortgage loans	978	1,680
Policy loans	735	1,106
Collateral loans	16	13
Real estate	144	160
Other investments	164	375
Cash	82	92
Total assets	5,341	8,805

TABLE 27. DISTRIBUTION OF PERSONAL INCOME, BY SOURCES AND BY INCOME CLASSES, IN PERCENTAGES, 1922 [1]

INCOME CLASSES	Wages and salaries	Business	Partnerships	Profits from sales of real estate, stocks, and bonds	Capital net gain from sale of assets	Rents and royalties	Interest and investment income	Interest on Government obligations [2]	Dividends	Fiduciary
Under $1,000..	36.8	18.2	3.4	4.1		10.9	11.6	0.2	13.4	1.0
1,000 to 2,000..	79.5	7.5	2.0	.7		3.7	4.5	.0	1.4	.2
2,000 to 3,000..	74.8	10.0	2.6	1.1		4.3	4.8	.0	1.7	.3
3,000 to 5,000..	59.8	16.0	4.8	2.5		5.1	6.7	.0	4.4	.5
5,000 to 10,000..	43.9	15.8	7.9	4.7		6.1	8.4	.2	11.3	1.2
10,000 to 25,000..	33.9	11.1	9.9	6.2		5.6	9.7	.3	20.9	2.1
25,000 to 50,000..	25.3	8.4	11.2	6.2	1.1	4.5	10.0	.4	30.1	2.5
50,000 to 100,000..	18.7	6.2	12.3	4.3	5.2	3.7	9.7	.4	36.2	2.8
100,000 to 150,000..	14.1	4.5	13.5	3.8	7.9	4.0	9.1	.3	39.1	3.2
150,000 to 300,000..	9.4	3.5	13.4	4.3	12.8	3.1	8.5	.3	40.6	3.7
300,000 to 500,000..	6.1	2.8	12.5	3.2	17.5	2.2	6.5	.5	45.4	2.8
500,000 to 1,000,000..	3.4	1.9	6.6	2.4	25.9	2.3	8.0	.3	45.1	3.6
$1,000,000 and over....	2.9	1.4	4.2	2.5	32.6	3.0	4.3	.5	46.9	1.3
Total.....	55.0	11.4	5.7	2.9	1.0	4.9	6.9	.1	10.7	1.0

[1] *Statistics of Income*, Report of the Treasury Department for 1922, p. 10.

[2] Not wholly exempt from tax.

TABLE 28. PHYSICAL PRODUCTION AND MONEY IN THE UNITED STATES, 1880–1920 [1]

DATE	INDEXES OF PHYSICAL [2] PRODUCTION BASE: YEAR 1914	ALL CURRENCY AND DEPOSITS AVAILABLE FOR SPENDING [3]	
		Currency (In millions of dollars)	Demand Deposits (In millions of dollars)
1880	35.0	..	..
1881	37.8	891.7	1,821.7
1882	36.5	965.1	2,023.2
1883	39.8	980.6	2,316.8
1884	39.3	985.3	2,017.0
1885	39.0	898.7	1,959.1
1886	41.4	958.7	2,230.5
1887	42.3	1,089.3	1,970.5
1888	41.7	1,128.6	2,078.0
1889	45.3	1,064.1	2,214.7
1890	48.5	1,105.8	2,368.9
1891	48.7	1,137.7	2,383.5
1892	53.0	1,049.3	2,601.9
1893	46.5	1,161.0	2,519.0
1894	47.4	989.9	2,613.9
1895	50.4	1,019.1	2,729.7
1896	53.5	1,167.0	2,738.0
1897	54.8	1,143.4	2,837.0
1898	57.8	1,205.3	3,486.3
1899	61.4	1,318.1	4,165.7
1900	62.1	1,450,3	4,589.3
1901	66.0	1,539.2	5,420.7
1902	67.8	1,573.9	5,873.9
1903	73.6	1,699.5	6,019.6
1904	72.8	1,653.2	6,197.8
1905	79.1	1.751.9	6,636.2
1906	83.8	1,922.3	6,807.7
1907	91.8	1,962.2	7.273.3
1908	85.3	1,964.1	6,636.5
1909	91.9	1,922.1	6,778.6
1910	93.1	1,956.8	6,927.7
1911	91.4	1,956.1	7,830.6
1912	99.5	2,042.0	7,853.3
1913	104.5	2,126.9	7,770.2
1914	100.0	2,069.1	8,946.7
1915	110.6	2,117.0	9,012.7
1916	131.7	2,388.4	11,388.7
1917	123.9	2,629.3	14,815.0
1918	117.6	3,810.3	16,906.8
1919	114.6	4,270.3	19,574.3
1920	..	4,770.2	21,071.1

[1] From statistics presented by Willford I. King, in Bankers Statistics Corporation, *Interlocking Chart Series*, No. 4. September 21, 1920.

[2] A weighted combination of important indicators.

[3] Estimated by means of a careful analysis of official Government reports. Government supply of ready cash and demand deposits are included, as well as amounts available for use of individuals.

TABLE 29. EFFECT OF CORPORAT

(In thousa

SECT

CORPORATION	1913	1914	1915	1916
1. American Can Company	+12,036	−1,253	+1,634	− 5,363
2. American Felt Company	+ 333	+ 420	− 205	− 249
3. Bessemere Coal, Iron and Land Company	+ 371	+ 85	−1,641	− 30
4. Boston Wharf Company	+ 564	+ 186	+ 236	+ 323
5. Cluett Peabody and Company	− 716	− 120	− 904	− 954
6. Electric Storage Battery Company	− 41	− 48	+2,448	− 868
7. Elkton Consolidated Mining and Milling Company	+ 13	+ 34	+ 36	− 515
Summary	+12,560	− 696	+1,604	− 7,656

SECT

8. Walter Baker Company	− 59	− 183	+ 227	+ 142
9. Baldwin Piano Company	− 140	− 203	− 270	− 373
10. Brighton Mills	+ 155	− 184	− 210	+ 521
11. Chicago Railway Equipment Company	− 266	+ 296	+ 479	− 644
12. Craddock-Terry Company	+ 453	+ 312	− 147	− 547
13. Crompton and Knowles	− 744	− 91	+ 159	− 490
14. Eppens Smith Company	+ 22	− 16	− 1	− 2
15. General Chemical Company	+ 1,399	+1,336	− 725	+ 70
16. Gillette Safety Razor Company	− 150	− 560	− 770	− 2,273
Summary	+ 670	+ 707	−1,258	− 3,596

SECT

1. American Can Company	+12,322	−2,101	+1,469	−10,267
2. American Felt Company	− 116	+ 569	− 492	+ 101
3. Bessemere Coal, Iron and Land Company	+ 186	+ 111	−1,733	− 10
8. Walter Baker Company	+ 33	− 47	−1,110	+ 1,174
9 Baldwin Piano Company	− 593	− 543	− 635	− 688
Summary	+11,832	−2,011	−2,501	− 9,690

Notes: The problem dealt with in this table and the general method of approach are presented
The source of statistics is Poor's *Manual of Industrials.*

A minus sign indicates failure of the corporation (as explained in the text and with the qualificatio
the opposite condition.

During the ten-year period there were no changes in the capitalization of the corporations in Sec
tions 1, 2, and 3, do not separate accounts receivable from bills receivable or accounts payable fro
payable from accounts payable. The figures in Section C take into account changes in the cash, ac

of dollars)

A

917	1918	1919	1920	1921	1922	Net 1913–22, inc.	Net 1914–20, inc.
2,851	+6,329	− 7,583	+ 2,360	− 4,804	− 6,567	− 360	− 1,025
284	+ 14	− 1,389	− 884	+ 1,481	− 775	− 970	− 2,009
409	− 218	− 197	− 478	+ 24	− 252	− 2,745	− 2,888
221	+ 148	− 31	+ 94	− 5	+ 32	+ 1,768	+ 1,177
555	− 546	− 4,760	+13,703	+ 1,457	− 2,687	+ 3,918	+ 5,864
311	+2,825	− 532	− 3,804	+ 3,067	− 151	+ 2,585	− 290
155	− 37	− 5	− 5	− 2	− 1	− 637	− 647
,926	+8,515	−14,497	+10,986	+ 1,218	−10,401	+ 3,559	+ 182

B

,235	+ 383	+ 593	− 2,014	+ 205	+ 382	+ 1,911	+ 1,383
825	− 363	+ 303	+ 1,230	− 676	− 889	− 2,206	− 501
5	+1,065	− 545	+ 3,264	+ 660	+ 656	+ 3,247	+ 1,776
24	+ 119	− 555	− 474	+ 394	− 876	− 1,503	− 755
674	− 26	− 643	+ 1,009	+ 272	− 120	− 111	− 716
,689	− 70	− 2,110	+ 2,153	− 1,323	+ 117	− 710	+ 1,240
204	+ 54	− 151	+ 289	− 167	− 35	− 211	− 31
,167	− 207	+ 3,849	−34,036	+10,260	+ 2,103	−18,118	−31,880
,831	+1,124	+ 5,730	− 1,142	− 211	− 88	+ 6,491	+ 6,940
,904	− 51	+ 6,471	−29,721	+ 9,414	+ 1,250	−11,210	−22,544

C

882	+1,498	−14,630	− 4,770	+ 3,004	−11,894	−37,251	−40,683
637	− 190	+ 2,819	− 2,552	− 3,797	− 481	− 6,776	− 2,382
311	− 154	− 162	− 451	+ 27	− 190	− 2,687	− 2,710
387	+ 783	− 815	− 1,747	+ 467	+ 468	+ 1,593	+ 625
638	− 353	+ 809	+ 1,217	+ 1,149	− 1,913	− 3,188	+ 1,831
081	+1,584	−11,979	− 8,303	+ 850	−14,010	−48,309	−46,981

osts and Profits, by Hudson B. Hastings, Pollak Publication, Number 3, 1923.

ere noted) to disburse sufficient money to equal the value of the goods it sold. A plus sign indicates

A; but there were changes in the capitalization of those in Section B. The reports for corpora-
s payable. The report for corporation 8 does not separate accounts receivable from cash, or notes
ts receivable, accounts payable, and inventories.

INDEX

Abbatti, H., cited, 364.
Advertising, and consumers' free choice, 60–61, 190; not always paid for by consumers, 65.
American Tel. and Tel. Co., cited, 228, 389.
Annual equation, 248–49, 256, 258; and corporate income, 260–82; and government finances, 333–49; and individual income, 283–96; and time-lags, 362–64; as affected by volume of money, 307–32; effect of banking practices on, 282, 289–91; effect of savings in accounts receivable on, 274–76; effect of corporate savings in cash on, 281–82; effect of savings in fixed capital on, 276–78; effect of savings in inventories on, 274; effect of life insurance on, 292.

Bank credit, defined, 26; how created, 307–08; volume of, 322.
Bank deposits, statistics of, 314–15.
Bank loans, effect on business of paying off, 313–16.
Bank savings, effect on annual equation, 289–92.
Banks, profits of national, 125.
Barter economy, compared with money and profit economy, 3–5, 57–58, 79, 232, 234, 240, 246, 247, 249–50, 287.
Bilgram and Levy, cited, 318.
Bradstreets', cited, 139.
Brandeis, Louis D., cited, 70.
Brookings, Robert S., cited, 139.
Bureau of Agricultural Economics reduces risks, 75.
Business cycles, and mental attitudes, 236–39; complex causes of, 266; composites of many cycles, 251; sequence of events in, 373–75.
Business depressions, 6–8, 135–38, 154, 227–31, 236–39, 241–46, 248–51, 253, 266, 277–78.
Business failures, 82–86, 107–08.
Business losses, due to depressions, 227–28; eliminate the unfit, 196–200; number of, varies, 107–08; price of progress, 109; reduced by competition, 88–92; reduced by knowledge and publicity, 68–73; reduced by reducing risks, 67–77; size of, 104–09, 161–62; sometimes called profits, 103–10; undesirable, 73; would not be eliminated by communism, 109.
Buyers determine prices, 172–79.
'Buyers' strike,' 238–39.

Capital, vs. income, 28; income of capital, 150–61.
Capital facilities, growth of, as affected by taxation, 345–49.
Capital issues, volume of, 343–45.
Capitalism, defined, 21; not wholly satisfactory, 233.
Carlyle, Thomas, cited, 155.
Carver, Thomas N., cited, 40.
Circuit flow of money, 284; diagram of, 253–56, 259; defined, 252.
Circuit time of money, 257–58.
Clark, J. B., cited, 50.
Coal, profits in, 122–24.
Commodities, defined, 27.
Communism, abolishes free choice, 64; disfranchises consumers, 215; not a substitute for the profit system, 198, 215–16; overlooks problem of competition, 180–81.
Communist Manifesto, cited, 12.
Competition, due to consumers' free choice, 63–64, 180, 233; never perfectly free, 89–92; of buyers determines prices, 181–82; reduces profits and losses, 88–92, 93.
Comptroller of the Currency, cited, 291.
Consumer purchasing power, 235; deficiency of, universally feared, 240–46; increase of, requisite for rising prices and confidence, 237, 239.
Consumers determine production, 190–202.
Consumers' freedom of choice, the chief business risk, 57–66.

Consumption, basis of standards of living, 224–26; the end of production, 231. *See also*, Annual equation.
Coöperative societies only partially successful, 15.
Corporate income, statistics of, 112–16.
Corporate surplus, confusion in use of term, 99–100; in relation to consumer demand, 149, 164; of the U.S. Steel Corp., 146; serious effects of variations in, 148–49; variations in, 143, 145–48, 163–64.
Costs in relation to profits, 178–79, 208–09.
Currency, defined, 26.

Dearborn Independent, cited, 187.
Deflation, as a business depressor, 302–06; disastrous economically, 78; not brought about by banks for profit, 86.
Demand, and supply (*see* Supply); defined, 35; factors affecting, 38; failure of, the obstacle to economic prosperity, 240; for producers' goods, 370–72.
Department of Commerce reduces risks, 76.
Distribution of wealth, 188.
Dividends, less certain than wages, 154–55; ratio of, to total personal income, 150–53; ratio of profits to, 142; yearly variation of, 141–45, 147, 163.
Dollar-votes determine production, 191–93, 214; determine profit-makers, 196–97.
Douglas, C. H., cited, 364.
Douglas, Paul H., cited, 377.
Dunn, William F., cited, 138.
DuPont, Pierre, cited, 346.

Economic laws, 188.
Economic problem, the, 6, 223 ff., 233.
Economics, defined, 26.
Economics of despair, 417.
Effective demand, defined, 35.
Employment, dependent on profits, 18–23.
England, dividend rate in, 143–44; price-level in, 81–82; profits in, 117–18, 134–35; surplus of industrials in, 147–48.
Equitable distribution of income, not a solution of the problem, 354–58.

Failures in business. *See* Business failures.
Falling prices, effect of, on business, 302–06.
Federal receipts and expenditures, 333, 334.
Federal Reserve Banks, disposition of earnings of, 144.
Federal Reserve Bank of Boston, cited, 343–45, 359.
Federal Reserve Bank of New York, cited, 131, 382–89, 391.
Federal Reserve System, 328; statistics of, 315.
Filene, Edward, cited, 243.
Fluctuations of business, dependent largely on flow of money, 234–36; inevitable, 231. *See also*, Business depressions.
Ford, Henry, cited, 33, 39.
Foreign trade in relation to consumer demand, 352–54.
Freedom of choice, cannot be successfully supplanted by Government control, 212–15, 218; cause of economic problems, 180; makes perfect stability unattainable, 258; of consumers, 57–66; only feasible way of determining production, 200–02; right of individuals, 192, 201–02.
Friday, David, cited, 137, 138, 146, 150.

Gambling risks, not business risks, 48.
General Electric Co., cited, 21, 264.
Germany, inflation in, 82, 215.
Glass, Carter, cited, 241.
Goods, defined, 27.
Government, cannot prevent large profits by price-fixing, 209–10, control of industry inadvisable, 198–99, 305–06; finances and the annual equation, 333–49; proper agency for disseminating information, 73–77, 203; should make stable price-level its aim, 207; should not control prices and profits, 212–20, 233.

Hamsun, Knut, cited, 3.
Harding, W. P. G., cited, 319.
Harvard Com. on Econ. Research, cited, 343.
Hastings, H. B., cited, 395.
Helvetia Milk Condensing Co., cited, 206–07.
Hobson, J. A., cited, 321, 356.
Hoover, Herbert, cited, 76, 228, 240, 339, 405.

Imports feared, 405.
Income, contrasted with capital, 28; corporate, variations in, 112–15; defined, 28; equitable distribution of, not a solution of the problem, 354–58; from doing and from owning, 38–39, 155–60; of labor and capital, variations of, 150–61, 164; real, contrasted with money income, 28–30; sources of, 37–40; tax statistics, 101, 334.
Indexes, of business, 228, 343, 359; of employment, 381; of money, 343; of physical production, 314; of prices, 81, 315, 343, 344, 367; of profits, 106; of speculation, 343; of volume of trade, 343, 392; of wages in factories, 391.
Inflation, brings higher profits, 116, 133; caused by War, 82; dangers of, in printing money, 214–15; disastrous economically, 78–81; effect on Federal Reserve Bank, 85–86.
Installment buying, 329, 411.
Insurance, 51–53.
Interest rates, fixed by law, 214.

Kahn, Otto H., cited, 346.
Keynes, J. M., cited, 159.
King, Willford I., cited, 261–63, 366.

Labor, fears overproduction, 245–46; not to blame for business recessions, 229–31.
Lag of wages, behind prices, 363–64.
Laidler, Harry W., cited, 63.
Lawrence, F. W. Pethick, cited, 324.
Life insurance, use of funds by insurance companies, 292–93, Table 26, Appendix.
Limited market, 240–46.
London *Economist*, cited, 117.
Losses. *See* Business losses.

McKenna, Reginald, cited, 264, 304.
Managed currency, necessity of, 330–32.
Manufacturers' Record, cited, 232, 339.
Market news service, 75–76.
Marshall, Alfred, cited, 370, 415.
Martin, P. W., cited, 317.
Marx and Engels, cited, 12.
Mellon, Andrew W., cited, 345.
Mill, John Stuart, cited, 173.
Mills, Ogden L., cited, 346.
Money, cited, 6, 24, 226, 247, 253, 259.
Money, and profit economy, 4 ff., as a medium of exchange, 4 ff., 79; as suspended purchasing power, 5; circuit flow of, and the annual equation, 247–59; circuit flow of, defined, 252; circuit time of, defined, 256; circuit velocity of, defined, 252; contrasted with wealth, 27–28; defined, 26; effect of changes in volume of, on circuit flow, 259; factors altering circuit time of, 257; invested not the same as money spent, 283–85, 291–94; not a good measure of value, 79, 82; options that go with, 57–59; price of, 215; quantity theory of, 323; rates, 345; sensitiveness of business to the value of, 85, 108; unstable purchasing power of, cause of profit and loss, 78–87; velocity of, 329; volume of, and the annual equation, 307–32; volume of, in circulation, 314, 315.
Monopoly, 90–91, 174, 188–89.

National banks, dividend rates of, 144–45; profits of, 125, 127.
National Bureau of Economic Research, cited, 152, 153.
National City Bank letter, cited, 186.
Nearing, Scott, cited, 153–54.
New England, savings in, 360.
New York Times, cited, 295.

Overproduction, feared as soon as prosperity sets in, 242 ff.; in general, impossible in barter economy, 224; result of failure to forecast consumers' choice, 203.

Price-bidding, determines produc-

tion, 190; eliminated in some cases, 182–84; results in large profits for favored producers, 210–11.
Price-fixing, by Government, does not prevent large profits, 209–10, 217–18.
Price-level, absolute stability of, not essential, 258; changes in, cause maladjustments between industries, 86–87; determination of, 172; in relation to business, 302–06; should be made more nearly stable, 207; unstable, 78–87, 206–07, 323.
Price regulation not feasible, 183, 184, 212, 219.
Prices, right when they move goods, 184–85; cause unavoidable profits, 205–06; constitute orders for future production, 190–203; contrasted with price-levels, 34–35; determine who gets the goods, 180–89; determined by buyers, 172–79; effect on business, of falling, 302–06; function of, 185, 200–01; Government control of, impracticable, 212–20; index of, 343, 344, 367; lag of wages behind, 363–64; lowered by mass production, 178–79.
Producers' goods, demand for, 370–72.
Production, consumption sole end of, 231; costs of, do not determine prices, 176, 177; determined by buyers, 190–203; determined by prices and profits, 200 ff.; possible extent of, 226–29.
Production-consumption equation. *See* Annual equation.
Profit motive, does not always safeguard natural resources, 219; effect of, on general welfare, 97; necessary, 15–18, 232–33.
Profiteers, 171–72, 185–88, 204–05, 207–09, 217–20.
Profits taxes, effect on business of, 343–47.
Profits, appropriated for public use, 218–19; basis of economic order, 5; chiefly due to consumers' free choice, 63–65; determine quantity of production, 193–96; determine who stays in business, 190–203; due to chance, 41–42; effect of disbursement of, 273–82; effect of, on circuit flow of money, 259; effect of War on, 137–38; eliminate unfit, 196–200; employment dependent on, 18–20; from doing and from owning, 157, 160–61; Government control of, impracticable, 74, 212–20; heart of industrial life, 9 ff., 169; impossible to predetermine, 31–33; indictments against system of, 169; in relation to costs, 178, 208–09; kinds of, defined, 30–31; no 'normal' rate, 111, 115, 118, 138–40, 162–63, 164–65; of large concerns, 197; rarely increased by limiting output, 195–96; reduced by competition, 88–92; reduced by knowledge and publicity, 68–73; reduced by reducing risks, 67–77; relation of, to welfare of mankind, 97–98; result from low costs, 208–09; result from unstable price level, 79–87, 205–07; reward of risktaking, 46–48; 53–56, 92; sometimes losses, 103–09, 204; sometimes unavoidable, 204–11; sources of, 37–38; sources of livelihood, 20–23; statistics inadequate, 98–101; system not completely justifiable, 23–24, 169–70; the difference between cost and selling price, 31–33; wide variation of, 111–40, 162–63.
Public ownership, 15, 305.
Public utilities, profits of, 120, 121, 136.
Public works, in relation to depressions, 339–40.
Publicity, reduces profits and losses, 69–73.
Purchasing power. *See* Money.

Quantity theory of money, 323.

Railroads, profits of, 119, 121, 136.
Real wages, as estimated by Paul H. Douglas, 377; defined, 29.
Reserve ratios, Federal Reserve System, 344.
Risks, business risks not gambling risks, 48–49, 92; cause of profits and losses, 53–56, 67–77, 92–93; due to consumers' free choice, 57–66, 92; not accurately measurable, 50–51; of shifting price-level, 79,

93; sometimes covered by insurance, 51–53; universal, 45–58, 92.
Russia, experience of, in directing production, 192; experience of, in judging consumers' wants, 202, 216; inflation of money in, 82, 215.

Sabotage of profit enterprises, 194.
St. Clair, Oswald, cited, 319.
Savings, bank deposits, 358–61; corporate, 260–82; in consumable commodities, 287–88; in depressions, 238–39; in hoarding currency, 288–89; in real estate, 286; influences of, on circuit flow of money, 259, 260, 399; individual, 283, 400; invested and money spent, distinction between, 283–85; necessity of, 260; of business concerns, 262–63; of the Nation, 261; use of, in hard times, 358–61; use of, by life insurance companies, 292; use of, by savings banks, 291; various kinds of, 286, 400.
Seligman, Edwin R. A., cited, 345.
Services, defined, 27.
Smith, Adam, cited, 232.
Snyder, Carl, cited, 382–89.
Sombart, Werner, cited, 20.
Speculation, and business risks, 49; and consumer demand, 361–62; index of, 343; means of reducing profits and losses, 71.
Stable prices, would reduce profits and losses, 78–87.
Standards of living, 13, 33, 188; could be much higher, 227, 229; depend on consumer purchasing power, 234–35, 251; gauged by consumption, 224–25; higher, end of economic activity, 224, 229; higher, necessitate savings, 260.
Standard Statistics Co., cited, 105–07, 114–16, 132.
Static society, 49–50.
Statistical agencies reduce risks, 72–73.
Statistics regarding profits, essential, 97; now inadequate, 98–101; reveal important facts, 101–02.
Studebaker Corp., cited, 19.
Supply, and demand, automatic balance of, 249, 318–21; and demand determine prices, 173 ff.; and demand, illustration of perfect balance of, 269–73; defined, 35.
Swift & Co., distribution of receipts of, 265; profits of, 130.

Tawney, R. H., cited, 71–72.
Taxation, as means of more equitable distribution of products of industry, 218–19; effect of, on growth of capital facilities, 345–49; in relation to business, 339–49; in relation to consumer demand, 334–39; receipts from, 334.
Tax-exempt securities, 343–47.
Thoreau, Henry David, cited, 22.
Thrift, the dilemma of, 294–96.
Time-lags and the annual equation, 258, 362–64.
Trade, fluctuations in, 366; volume of, 343.
Trade Winds, cited, 243.
Tryon, F. G., cited, 122.

Unemployment, chiefly caused by deficient consumer buying, 196, 234; in relation to profits, 18–23.
U.S. Steel Corp., profits of, 129; surplus and dividends of, 146–48.
Unstable money, cause of profits and losses, 78–87.

Veblen, Thorstein, cited, 201.
Velocity of money, 329.
Viner, Jacob, cited, 316.
Volume of trade, index of, 343.

Wages, 17; contrasted with real wages, 29; dependent on profits, 20–22; in prosperity and in depression, 380; lag of, 363–64; more certain than profits, 154.
Wall Street Journal, cited, 145.
Wallis, P. and A., cited, 319.
War, causes of, 240, 246, 410; profits of, 137–38.
Ward, Harry F., cited, 16, 46, 194.
Watts, F. O., cited, 318.
Wealth, contrasted with money, 27–28; distribution of, 174.
Webb, Sidney and Beatrice, cited, 10, 13, 14, 21, 38, 156, 169, 201.
Wing, David L., cited, 122.
Withers, Hartley, cited, 169, 202.
Wyllis-Overland Co., cited, 99.

BOSTON PUBLIC LIBRARY
3 9999 10019 146 7